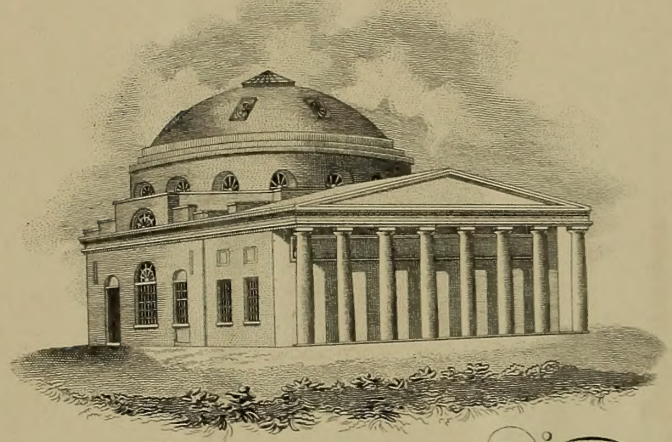
SEP 25 1940

LIBRARY
OF THE
School of Medicine



University of Maryland

University of Maryland Theses

Early Doctor of Medicine and Doctor of Physic Dissertations with Corrected Tables of Contents

These manuscripts described as either an Inaugural Dissertation or an Inaugural Essay were presented to the University of Maryland for the Degree of Doctor of Medicine and/or Doctor of Physic during the years 1813-1887. The individual dissertations were bound together during the 1940's. The original tables of contents for the bound volumes contained multiple errors in authors' names, titles, and/or years. To address these errors, an additional "Corrected Table of Contents" has been inserted at the beginning of each volume.

The project team who investigated and corrected the tables of contents were Richard J. Behles, Historical Librarian/Preservation Officer; María Milagros Pinkas, Metadata Management Librarian; Angela Cochrane and Carol Harling-Henry, Resources Division; Sarah Hovde, Abra Schnur and Megan Wolff, Services Division.

These dissertations were digitized in 2011-2012 and are available at the UM Digital Archive (archive.hshsl.umaryland.edu) and the Internet Archive (www.archive.org).

(CORRECTED TABLE OF CONTENTS)

UNIVERSITY OF MARYLAND

THESES

1857 (c)

Author	Title
Vampill, Rudolph	Croup
Veitch, Eldridge Jr.	Acute Dysentery
Alday, Alfred F.	Rheumatism
Nevitt, Napoleon B.	Epilepsy
Butler, James H.	Scarlatina
Morgan, D.C.	Wounds
Zimmerman, George M.	Pneumonia
Haynes, George W.	Gonorrhoea
Fowler, James C.	Gunshot Wounds
Kennard, Joseph M.	Puerperal Fever
Fleming, Robert	Typhoid Fever
Smith, Scott B.	Hernia
Whiteford, Alfred H.	Inflammation
Lawrence, Virgil C.	Typhoid Fever
Scott, Henry C.	Fractures of the Lower Extremity
Birch, Andrew D.	Intermittent Fever
Ewing, John	Amaurosis

1 Noteworthy illustration

HSHSL 2012 for the UM Digital Archive. Sources consulted for corrections: Original Dissertation; University of Maryland Medical Faculty, Matriculation List, 1821-1851; Cordell, Eugene F. "University of Maryland, 1807-1907" (New York : The Lewis Publishing Company, 1907), Volume 2.

UNIVERSITY OF MARYLAND

THESES

1857 (C)

Vampill, Rudolph	Croup	21p.
Veitch, Eldridge Jr.	Acute Dysentery	42p.
Alday, Alfred F.	Rheumatism	48p.
Nevitt, Napoleon B.	Epilepsy	47p.
Butler, James H.	Scarlatina	40p.
Morgan, D. C.	Wounds	24p.
Zimmerman, George M.	Pneumonia	20p.
Haynes, George W.	Gonorrhoea	16p.
Fowler, James C.	Gunshot Wounds	20p.
~~Rennard~~ Kennard, Joseph M.	Puerperal Fever	56p.
Fleming, Robert	Typhoid Fever	12p.
Smith, Scott B.	Hernia	22p.
Whiteford, Alfred H.	Inflammation	22p.
Lawrence, Virgil C.	Typhoid Fever	31p.
Scott, Henry C.	Fractures of the Lower Extremity	35p.
Birch, Andrew D.	Intermittent Fever	22p.
Ewing, John	Amaurosis	27p.

1Mb
18915

18

An

Inaugural Dissertation

on

Croup

Submitted to the examination of the

Provost, Regents & Faculty

of Physic

of the

University of Maryland

for the

Degree of Doctor of Medicine

by

Rudolph Vampill

of

Poland

1851.

Croup.

This disease may be assumed to be one of the most common of children. Its aspect is alarming, and its ravages when neglected or improperly treated, rapid and terrible; but it is consoling to reflect that, when opposed with promptitude and judgment, it may be confidently ranked among those maladies over which the powers of medicine exhibit most clearly their divine control.

Croup, although known as early as the time of Hippocrates, it has attracted little attention till Dr Blair of Scotland in 1718 first described it under its present name.

Croup is a disease of high vascular irritation of the larynx, or larynx & trachea mucous membrane, combined with spasm of the inferior muscles of the larynx, giving rise to peculiar modifications of voice, cough, and respiration. There are two distinct varieties recognised,

the catarrhal croup, or false croup, and the pseudo-membranous croup or true croup; the first variety found very frequently in this country, which is very curable if properly treated, the other variety more in Europe which is by far more fatal in most of those attacked terminate fatal even under the best and prompt treatment.

Croup usually occurs between, seldom before the second dentition, or after they attain the age of puberty. It occurs though rarely in adults.

Catarrhal croup. The symptoms consist in a very suffocating difficulty of breathing, the respiration is loud, hurried, anxious, accompanied with violent muscular effort, and a struggle painful to witness. There is cough, attended with a peculiar shrill sound resembling the crowing of a cock which if once heard, will never be forgotten, it is described as resembling the barking of a dog. The symptoms are discovered the change in the voice, cough,

may either precede or follow it a short interval the febrile excitement. The eye is brilliant and suffused, the skin hot and dry, and the cheek flushed. Some writers have divided the history of the affection into three stages, as the precursory, the confirmed, and the stage of collapse. Although the times of transition cannot be always precisely drawn yet the distinction should be kept in mind, as useful in the treatment. The incipient, or, as some call it, the catarrhal stage, is hardly to be discerned from the forming stage of catarrhous fever, except that perhaps, there is somewhat more ringing or shrillness in the cough, and a less diffused râle throughout the chest. The age of the child should make us attentive to this matter. Croup is more to be dreaded while the process of dentition is going on than at any other period of childhood. In many instances it sets in spontaneously

in the night, and more frequently in the early part of it towards morning. The child usually starts out of sleep with a peculiar dry, sonorous, ringing cough frequently called the croupy cough believed to be occasioned by a certain spasmodic rigidity of the vocal cords. The voice is usually more or less rough and hoarse, but very rarely quite extinct, which is an important point in the diagnosis of the two varieties. In the next stage of its progress, the disease offers, when well developed, a most impressive picture. The nostrils of the patient are distended by the struggle for breath, the eyes protrude, inspiration is attended with a harsh whistling or whizzing; the face at first flushed, becomes irregularly livid, the child grasps its throat with its hand, and complains of pain in that part. The pulse becomes extremely frequent and corded, there is incessant

restlessness, and the little sufferer, by its expression of countenance, it moans, and its entreaties for help, with every other sign that its age and degree of intelligence admits of, shows the highest intensity of distress. The cough is at first loud, resonant with the peculiar sound formerly alluded to, but after a time becomes lower and feebler; and in the third stage which has been regarded as a condition of collapse, is little more than a whispered or whizzing effort. The face now assumes a more livid hue, or is very pale, the extremities cool, the pulse very frequent, feeble and irregular, and a condition takes place approaching asphyxia during which the spasm relaxes, and the air is allowed again to enter the lungs more freely. The violent symptoms become moderated, and the paroxysm gradually subsides, so that the child falls to sleep, and upon awaking, is found to have been greatly relieved. In some cases complete

and fatal asphyxia may take place. There are two modes in which the fatal termination may take place; either the symptoms just recounted increase with rapid progression, and suffocation ensues from the clogging up the larynx with its own tenacious secretions, and or, the signs of spreading inflammation extend into the bronchia, and even effect the pulmonary tissue; while a certain amount of expectoration, which follows each effort in coughing, protracts the case, even though beyond the hope of ultimate relief, it may be for some days, during this condition respiration is performed with violent exertion of all the muscles which can be brought into play.

The Pathology of croup has been much discussed, there is redness of the mucous membrane of the larynx, trachea and bronchi, either in patches or continuous, with occasional swelling of the submucous tissue from

inflammatory infiltration, and sometimes mucus is found in the air-passages, which becomes in a more advanced stage often purulent. Occasionally patches of adhering false membrane may be detected, but in some instances, no signs of disease were discovered in the mucous membrane, probably the patient died of spasm, consequent upon high vascular irritation or congestion, the marks of which disappear with life.

The Prognosis of catarrhal croup is as stated before always favorable, if treated early and is not complicated, and very often does not require the advice of the physician. But if neglected, until the inflammation has extended to the ultimate ramifications of the bronchia, or into the pulmonary tissue itself, or assumes the form of true croup, the disease not unfrequently terminates fatally.

Pseudo Membranous croup, true croup is mor

frequently found in Europe, but is rare in this country. The symptoms may be those of catarrhal croup, but more generally has the inflammation from the commencement, the inflammation and exudation being simultaneous, which is to be ascribed to a peculiar character of inflammation or of the blood. The cough is hoarse and of a gravelloni, the voice is hoarse also which gradually into a whisper. Every cough is followed by a short whistling or sibilant sound in inspiration, and is paroxysmal. There is pain in the throat and upper part of the chest, great dyspnea, restlessness, anxiety and feelings of suffocation. When the inflammation is severe or extensive, there is high febrile action. The pulse is frequent, and so is the respiration which is sometimes between forty and fifty in a minute. If the case takes a favorable turn, the cough instead being dry, becomes loose, and

is by the child expectorated, or coughed up if old enough, which has various appearances, but occassionally mixed with flakes, mucus, patches, or even tubes of concrete fibrinous matter. More frequently such expectoration is observed after the exhibition of powerful emetics, which gives the patient great relief and even may recover gradually. Symptoms of the last stage sometimes come on very early, sometimes not before the third or fourth day which is characterized by excessive difficulty of breathing, the cough is less frequent, less audible but suffocative. If a fatal termination is approaching, the patient tosses about in great distress, the expression is anxious and alarmed, the pulse quick and feeble, the skin cool and pale and the lips livid, sizes on objects around him and grasps them convulsively for a moment; throws his head back, sizes his throat, as to remove some obstacle to respiration;

makes forcible efforts to expand the lungs; and after a variable duration of such sufferings, seldom above twenty hours, dies either with signs of convulsive suffocation, or those of complete exhaustion of vital energy. The duration of the disease varies from less than a day, to one or two weeks. These are the symptoms when it commences in the larynx, but sometimes it begins in the bronchi, and travels upwards; in other instances it starts in the fauces or posterior nares, this last is the so called diphtheritic form in which there is sore throat and pain in swallowing for a longer or shorter time antecedent to the laryngeal symptoms; and if the fauces be inspected, a white or yellowish membranous exudation may be seen in patches upon the soft palate, tonsil arches and pharynx or the whole fauces are thus covered. The first signs are hoarseness of the voice

and cough and after the occurrence of these the de-
vellopement proceeds as described before.

Diagnosis. The appearance of albuminous or fibri-
nous exudation in the fauces, and the expectoration
of patches or tubes of false membrane are the most
valuable. Barth and Roger state that a trembling
vibratory sound may often be heard in auscultation
during the ingress and egress of the air through the
larynx and trachea denoting the presence of false
membrane which is of some value in the diagnosis.

Anatomical characters. False membrane is always
found upon the surface of the mucous membrane of the
air-passages, sometimes only confined to the glottis,
sometimes lines the whole interior of the larynx. It
may adhere firmly, but more frequently loosened by mucus
or muco-purulent secretion. The false membrane
is sometimes found thick and of an opaque yellowish-

white or it may have a thin and delicate appearance. Below this deposit, if removed the mucous membrane is found more or less inflammed and reddened and red points or streaks correspond with those upon the seperated surface of the false membrane. The bronchial tubes are usually reddened and contain a whitish, greenish, or yellowish puriform mucus.

Causes of croup. These are numerous comprising all circumstances which give rise to catarrh, as exposure to currents of cold, damp air, wet feet, dentition, easterly winds or presence of undigested food, and other irritating crudities in the stomach.

A predisposition to it is often hereditary and transmitted through generations; it is built up under various conditions arising from previous attacks a repetition of which will most remarkably increase the degree of susceptibility to the invasion. Age is also a

precipitating cause will be more prevalent from one to seven years of age. It may be found in low localities.

Treatment of catarrhal croup. It should always be brought under control, an emetic should be administered without hesitation. If the attack is mild, Ipecacuanha may be given, if severe and accompanied by fever tartar emetic is preferable and should be given in sufficient doses in preference. To a child two years old, from four to six grains of Ipecac., or from one quarter to one third of a grain of tartar emetic may be given dissolved in water every fifteen twenty or thirty minutes, until vomiting is produced. Another remedy which may be used with advantage is Coxe's Hive Syrup a combination of senega, squill and Antimony; thirty to sixty drops may be given to a child two years old, repeated at short intervals, till it vomits. Should an emetic fail to act, then the child should be immersed into

a warm bath from 98° 100°, for fifteen, twenty minutes or longer which may be repeated if necessary. The spasm relaxes, breathing becomes easy, the voice looses much of its hoarseness, the chin falls asleep from which it awakes much improved, if not well. The subsequent treatment should be directed to given the bowels by castor oil, and sustaine a slightly nauseating or expectorant effect by small doses of ipecac: coine, or compound syrup of squill given every two, three, or four hours. In some instances, the spasmodic symtoms resist the action of an emetic, or return after intervals of comparative relief. In such cases if the house is full, it is proper time to bleed from the arm from two to four ounces may be taken from a child two years old. Tobacco has in many instances proved successful in the form of enema. Glass made out of the leaves, and applied upon

the throat. Turpentine also has been used with success, which is applied hot to the throat by smart friction, and a flannel well soaked retained on the surface by means of a bandage. it promptly relieves the fauces and soft parts of the throat. The simple milk of assafoetida was Cullen's favorite. it is often an excellent medicine given alone or with an equal quantity of syrup of squills.

It often happens that though the violent spasmodic symptoms give way there are yet considerable inflammation and fever, with some cough and dyspnoea, threatening a return of the paroxysm, under these circumstances it will be proper to give a full purgative dose of Calomel followed in a few hours by castor oil. At the same time the patient may be kept under the influence of nauseant expectorants.

Topical bloodletting cannot be much depended upon,

cords annoy the little patient and restrain the movements necessary in his eager struggles for breath. A warm mustard poultice may, instead, be kept applied to the throat and the neck. Should paroxysm recur or increase in violence, the same remedies must be applied, as emetics, warm bath, bleeding if the pulse will permit and the tobacco cataplasm. If after the employment of the above remedies prove unsuccessful, than it will be necessary to bring the system under the influence of mercury, one grain may be given every two hours, if it purges, to be combined with a little Dover's powder. Mercurial frictions may also be made to the inside of the upper and lower extremities.

Should the disease have advanced without medical aid into the last stage nervous stimulants, and stimulating expectorants will now become necessary, as

as decoction of seneka, assafoetida by the mouth and rectum, carbonate of ammonia, musk, oil of amber; wine-whey, animal broths and sometimes a little weak milk punch may be employed. If emetics should be deemed necessary, mustard, sulphate of copper or of zinc will best answer this indication. Externally, garlic and brandy may be applied to the breast and spine, or linniments of oil of turpentine.

Treatment of Pseudo-membranous croup. In the forming stage it differs but little from the catarrhal croup; after it has become obvious, that the case is truly pseudo membranous, as can be seen by inspection of the fauces and other symptoms, muriatic acid should be immediately employed, still better is nitrate of silver in solution from two scruples to two drachms to the fluid ounce of distilled water. The application should be extended to the borders of the glottis by means

of a probang. Dr Reed of Ohio treated this form of croup most successfully by the employment of the ethereal solution of iodine in the proportion of 3j-3j, carried into the larynx by a sponge; the little patient being brought under the influence of mercury as soon as possible. He should examine the lips of the glottis, occlusion of this opening by œdematous effusion may occur and admits of immediate relief by incision.

The most effectual mode of preventing further formation of false membrane is to bring the system as speedily as possible under the influence of mercury. It modifies the character of the secretion, which from being plastic, becomes mucous or puruloid and diffluent.

The best plan will be to give first a purgative dose of four or six grains and afterwards to follow this in from one to three grain doses every three or four hours. If it should prove too purgative, it may be combined

with small doses of Dover's powder. Mercury not only modifies the secretory process but by causing a liquid secretion favors the separation of that already existing, and thus meets the second indication.

Expectorant medicines should also be given, to promote the loosening of the false membrane of these, tartar emetic or sencha are preferable.

The alkalies have attained an extensive and firm confidence in the management of croup, as the carbonate of potassa, soda ammonia, common ley, made from wood ashes, have been used extensively in domestic management with success. They have been thought to dispose, like mercury, to mucous rather than to fibrinous secretion, and even to dissolve the secreted membrane, as they are known to do out of the body.

In the last stage, when the strength becomes exhausted our only hopes must rest upon stimulants and

supporting the strength. The best remedies to be used are carbonate of ammonia, wine-whey, and spirituous fomentations externally. Antispasmodics and anodynes will become necessary to quiet the extreme agitation of the patient, such as assafoetida and opium may be given by injection.

As a last resort, tracheotomy has been recommended and may be employed. A patient should not be suffered to die of suffocation in an early stage of croup; an opening should be made into the windpipe for the admission of air. But we should satisfy ourselves, by a careful examination, that the impediment to breathing is confined to the larynx; the thorax should be resonant on percussion and the respiratory murmur or loose mucous râle should be distinguishable.

On the other hand, in the more advanced stages of croup the disease is no longer a local inflammation of the

larynx and trachea. Post mortem examinations prove it to have extended itself through the minutest ramifications of the bronchia and air-cells, which are gorged with mucus or occluded with organized lymph, and when the pulmonary tissue has become solidified or hepatized. This extension is inferred, in the living subject from the peculiar complexion, gastly pale or livid and from the loss of resonance on percussion. Bronchotomy is not in any sense a remedial means, it has no tendency to remove the inflammatory actions going on in the trachea or to check their progress. By its success we merely obtain time for the vigorous and persevering employment of the proper measures, and if these should be neglected or carried into imperfect execution, the extension of the disease into the lung will be as likely to occur, and to prove fatal, as if the operation had not been resolved on.

Rudolph Campill.

An

Inaugural Dissertation

on

Acute Dysentery

Submitted to the Examination

of the

Provost Regents and Faculty

of the

University of Maryland

For the

Degree of Doctor of Medicine

By

Eldridge R. Veitch Jr

of Virginia

Dysentery is inflammation of the mucous membrane of the colon and rectum, characterized by small but frequent mucous or bloody evacuations, griping pains in the abdomen, straining at stool, and tenesmus. Inflammation in the larger intestines acid. rim. These symptoms would be ranked under enteritis. Dysentery may be acute or chronic.

Acute dysentery may occur with or without the slightest premonitory symptoms. When there are premonitory symptoms, they are general uneasiness, lassitude, impaired appetite, dull and transient pains in the abdomen, costiveness or diarrhoea, and other evidences of moderate intestinal disorder. Sometimes

The local symptoms make their appearance before those of a general character, and in very mild cases may run their course without any febrile symptoms. At other times the febrile and local phenomena make their onset at the same time, the patient being attacked with a chill almost at the moment he begins to complain of tenesmus and pain. Again and most frequently the fever precedes, and sometimes for a considerable time, before any disorder of the bowels are complained of. In such cases the dysentery is a secondary affection. In this disease we are presented with a regular gradation in severity, with the slightest attack affecting but a small tract of the intestines, which

soon is corrected by proper remedies applied judiciously. It is one which is most violent and dangerous forms of disease to which the human being is subject is. The heroic treatment being unable to accomplish its purposes. This great diversity in duration is due to the activity of the disease, and the susceptibility of the patient, and it is also important to know that it may depend upon the degree in which the disease is simple or complicated.

Generally mere inflammation of the mucous membrane of the large intestines is a mild affection; but it is very frequently associated at the onset with disease in some other organ or organs or with some morbid state of the system at large: which in various

degrees complicates the symptoms, and
increases the danger.

In the beginning of simple dysentery there
are usually griping pains in the abdomen
technically called torminā, irregular, in
their position and periods of recurrance
and attended by discharges from the
bowels by which they are partially relieved,
After a very short time, a sense of weight,
burning, or other uneasiness is experienced
in the rectum; with a painful and frequ-
ently returning inclination to go to stools,
without the ability to evacuate anything more
than a little bloody mucous. This feeling
of tenesmus increases and becomes the
most prominent feature in the case. The
abdominal pains appear to concentrate

themselves in some measure about the rectum. The calls to stools are very frequent and in some cases almost incessantly they are attended with much straining, so much that often it produces prolapsus ani, especially in children. with but partial relief. The discharges from their acridity occasions a burning or cutting pain in the anus which leads the patients to dread their return: and resist the disposition as long as possible. The passages are seldom less than a dozen in twenty four hours are often double or triple that number, and in very bad cases have been known to amount to one hundred and even to two hundred, After the first four evacuations which are more or less fecal the

Stools are very small, and consist of brains
-parent or whitish mucus or of mucus mixed
with blood, with these as the complaint
advances, a little whitish bile and shreds
of false membrane or small masses of coagu-
-lated matter are occasionally intermingled;
And in some instances, small hardened
lumps of feces called Scybala are discha-
-ged, though these are less common than
might be inferred from published accounts.
Fecalent evacuations are always attended
with great relief. The bladder and
urethra sometimes sympathize with the
rectum, and along with the tenesmus there
is frequent and difficult micturation,
In the female the vagina participates
in the same irritation. There is generally

more or less tenderness in the abdomen; and the degree and extent of inflammation can be ascertained by slight pressure with the hand, pain being produced in the region of inflammation.

There is always fever except in cases of very small extent. The pulse is accelerated, and usually somewhat full and forcible, the skin warm and dry, urine scanty, the tongue moist and covered with a dry whitish fur. The biliary secretion generally diminished.

Occasionally, in cases of some severity, the vital forces sink temporarily under the violence of the impression made upon the nervous system. The patient experiences an indescribable painful feeling of hollowness

or sinking in the abdomen. attended with a cold damp skin, a feeble pulse and almost threadlike, and sometimes nausea and vomiting. This condition soon passes over as the acrid secretion descends. In the simple form of the disease vomiting is not frequent.

In the majority of cases the disease takes a favorable or unfavorable turn about the sixth or tenth days. Sometimes from the extent and severity of the inflammation, the symptoms of depression appear at the onset, and the system never fairly reacts. Here the same ~~symptoms~~ condition appears to occur occasionly in mild cases The nervous system owes this to the violence of the first shock; and is unable

to reach, under the continued violence of the disease. The patient has throughout a very small feeble and frequent pulse, a pale, cool and clammy skin, anxious and sunken features, and a somewhat livid or purplish appearance about the eyes, about the lips, and at the roots of the nails. While at the same time there is increased redness in the local symptoms with much tumour and tenseness, incessant discharge tense and tumid abdomen; and great tenderness upon pressure. Such cases prove fatal in a few days. Danger much more commonly accrues from a continuance of the disease in ordinary cases, beyond a week or ten days

Should the symptoms not give way

by that time, they are apt to becomes aggravated. The tormina and tenesmus increase; the abdomen enlarged, tender and swollen, the discharges more frequent the pulse smaller and more rapid, the tongue assumes a dryish and brownish appearance, or throws off its fur and becomes red, smooth and somewhat glazed; the patient is restless, restless and exhausted, the stools are more copious and offensive and instead of consisting chiefly or exclusively of mucous or blood are mixed with purulent matter. Pains or radiated sensations from the upper bowels; and are sometimes nothing more than a bloody serum. Even after the worst of these symptoms the patient

may recover. Though the convalescence is usually tedious. and the case not unfrequently runs into the chronic form.

There are several varieties of dysentery as the Bilious, Adynamic, Intermittent, Remittent and Typhous.

As there is nothing peculiar in the bilious disorder, excepting the biliary disorder, from the commencement of the disease, great oppression in the epigastric region, more frequent vomiting; occasional yellowness, in various degrees of the tongue, conjunctiva, skin, and urine: greater amounts of fever; and a greater tendency to delerium.

The Adynamic, occurs in persons previously exposed to depressing causes.

inhaling impure and vitiated air. Confined in ships, prisons, besieged ~~camp~~ towns camp's, to unwholesome or insufficient food, continual fatigue and watchfullness. Any thing may cause it that has a tendency to prostrate the vital energies and vitiate the blood. The same influence is sometimes exerted by certain epidemic constitutions of the air.

Under these circumstances, along with the ordinary symptoms of dysentery in an aggravated degree, are those of malignant, typhoid, or scorbutic disease; such as nausea and vomiting; great thirst; a frequent, feeble, irregular pulse; a foul, brown or black, dry tongue, with sordes about the teeth;

a dusky skin, sometimes hot, sometimes cold, and occasionally marked with petechiae, dark livid spots, gangrenous vesications &c; reddish, brown, or black stools, more copious than in simple disease, and excessively fetid, or large hemorrhagic discharges, consisting often of altered uncoagulable blood; great prostration of strength from the beginning; and, finally, various evidences of nervous disorder, as anxiety, depression of spirits, headache, low delirium, subsultus tendinum, and stupor. All these symptoms are not found in every case, but are variously mingled, and in various degrees. Sufficient generally exists

to indicate pretty clearly the character of the case.

In the Intermittent, Remittent and Typhous, dysentery, are associated with these diseases, being a secondary affection, with nothing strikingly peculiar aside from the other varieties above mentioned, it generally yields to the proper remedies, given judiciously.

Prognosis. When the disease is about to terminate favorably, there is a general improvement in all the symptoms, the pain gradually become less frequent, and severe, the tenesmus diminishes, the stools become more copious and less frequent;

And assumes a bilious or fecal character; And at length a slight diarrhoea remains, which soon ceases.

On the contrary, a sudden cessation of the tormina and tenesmus, the occurance of tympanites, coldness of the extremities, or a cool clammy state of the skin in general, a livid or purplish hue of the nails, a very feeble, frequent, and irregular pulse, hiccough, involuntary stools, delirium, subsultus tendenum, and stupor, are symptoms of the most unfavorable kind.

Death may result in dysentery from the failure of the powers of life under the intensity of the irritation,

from general debility, from gangrene, or from the continued irritation, and exhausting effects of the combined inflammations and discharges.

The longer the disease continues without amendment, the greater is the danger, and a persistance beyond the fourteenth day may be looked upon as a ground for great solicitude. The danger is also proportionate to the extent of the inflammation. Ordinary sporadic cases of dysentery in temperate climates are seldom unfavorable.

It is when prevailing epidemically, or among great masses, as in armies or in miasmatic regions that it is so fatal,

Anatomical Characters. The mucous membrane of the rectum and lower colon always evinces signs of inflammation, in cases of death from dysentery. It is much reddened and thickened, and unfrequently ulcerated, Ulcers in fact exist in this disease much more frequently than in any other acute inflammation of the Alimentary Canal, unless in the follicular Enteritis of Typhoid fever and Small pox. They are either small and roundish, or large and irregular from the confluence of the smaller, having an abrupt ~~excavated~~ Edge, and are often covered with a concrete exudation having the appearance of a slough.

In some cases almost the whole of the membrane is covered with a coating of plastic lymph, upon the removal of

which the parts appear red and swollen, but without the loss of continuity; Occasionally real gangrenous sloughs are found; and cases are mentioned in which very large portions of the mucous membrane have been removed, probably by a combination of mortification and ulceration. In many cases, the redness, the thickening, and ulceration extend beyond the mucous membrane, and sometimes involve the whole of the parietes of the bowel, unless, it may be, the peritoneal coat. Perforations of the latter coat are exceedingly rare in dysentery. In protracted cases, the mesenteric glands are enlarged and softened, though seldom or never in a state of suppuration. In some instances

evidences of inflammation have been found existing through the colon, into the small intestines, and, it is said down to the stomach. The liver is frequently diseased especially in dysentery of tropical latitudes. Out of twenty-five fatal cases examined by Dr Parkes in India, seven were affected with hepatic abcess; and about the same proportion have been found by others.

In the adynamic or malignant variety, gangrene is much more frequently observed than in ordinary dysentery. And the mucous membrane when not mortified, exhibits a dark-purple or livid appearance.

Causes. A predisposition to dysentery is produced

by the continued influence of heat, augmenting the excitability of the alimentary canal, disordering the hepatic secretion and relaxing the surface of the body, so as to render it more susceptable to the influence of cold. One of the most common of the exciting causes is cold and moisture combined, hence the frequency of dysentery among persons exposed to the cold and dampness of nights after having been much heated during the day. The perspiration is checked and excitement is thus directed inwards; while at the same time the hepatic secretion is arrested, and congestion of the portal circle, and consequently of the mucous membrane of the bowels results. Substances

directly irritating to the bowels are often exciting causes. Among these may be mentioned unripe and acrid fruits, ripe fruits in large quantities, vegetables of difficult solution in the stomach, and unwholesome foods of all kinds, acrid and imperfectly fermented alcoholic liquors of all kinds, ciders, wines, malt liquors, &c, putrid waters; drastic purges; worms; and feculent and other accumulations in the alimentary canal.

It was a mooted question for a long time whether dysentery was a contagious disease or not, but of late it is almost unanimously agreed that it is not so in its ordinary form. In some instances the

Sudden appearance of the disease in a neighborhood and its rapid spread has led some to maintain with great power the contagiousness of the disease; but upon close examination they have found its causes, generally, perhaps in a tainted atmosphere, or unwholesome food, or something of like influence upon the system.

Typhus fever sometimes prevails epidemically in some instances extending over a great part of the country, or and most commonly confined to small limits. In the latter mode its often occurs in our country. It is especially apt to prevail in miasmatic districts preceding or accompanying intermittent and remittent fevers;

but sometimes it cannot be traced to any local cause whatever.

Dysentery attacks indiscriminately persons of both sexes, and all ages, and if one class of individuals is affected more frequently than another, it is probably owing to their greater exposure to the causes of the disease. It is much more prevalent in the Summer and Autumn than in winter, and in hot than in temperate climates. Miasmatic Countries are more subject to it than others; and Strangers are more apt to be attacked in those countries than natives.

Treatment. The indications are to sedate vascular action, remove all

irritating Causing, and treat the other
Symptoms as they may occur. The uncom-
plicated colitis the indications above Enumer-
-ated are the most frequent, with the
indication to Subdue inflammation. The
modifications of treatment required by
the State of the System, and by the
Coexistence of other diseases, will
be briefly spoken of after looking
at the remedies for simple dysentery.
Before looking at the general plan
of treatment Some of the individual
measures will be Spoken off.

Bleeding is not necessary in all
the cases of dysentery and in the
adynamic form it would
prove injurious. It however should

be restricted to when there is much pain and tenderness of the abdomen, with febrile action, and a vigorous pulse. One medical bleeding, is generally sufficient, but if the pain continues with a firm pulse it may be repeated. The constitution of the patient, highness of the febrile action and the state of the pulse, and the severity of the local symptoms will serve as guides to the use of the lancet.

Emetics have been highly recommended by numerous authors, and are of great value in the commencement of the disease. They are clearly indicated when the stomach is loaded with acrid accumulations

of any kind, as shown by Epigastric oppression, nausea, eructations of bile or other irritating matter, and frequent but ineffectual efforts to vomit, without the pain and tenderness of gastric inflammations. The best preparation is ipecacuanha from its mildness as well as its efficiency. Antimonial preparations; and Sulf Zinc have also been used.

Cathartics. Are among the most efficient remedies. One of the most prominent indications in dysentery is to free the bowels from all irritating secretions and accumulations; and second to diminish the portal congestion;

and both are both ameneed by
this class of remedies. The mildest
should always be preferred, because
drastics purges increase the irritation
and should always be avoided.
Calomel, Castor oil, neutral salts
as Sulphate of magnesia, Sulp.
Soda, tartrate of potassa and Soda.
are among the best for the acute
stage.
Diaphoretics are used by giving an
external direction to the circulating
fluids and by depleting from the
blood-vessels. But from the frequent
exposure of the surface they are
sometimes hazardous. When the skin
is hot and dry small doses of

Tartar Emitic or of the neutral mixture, may be given separately or Combined, at intervals of an hour or two. The effervescing draughts is preferable when there is nausea and vomiting. The vapour bath and warm bath have been highly spoken of by Some.

Opium is an invaluable remedy in dysentery. Besides relieving the sufferings of the patient and procuring sleep, which is necessarily much interrupted in this disease, it does good by diminishing the morbid sensibility of the bowels to the irritating matter they contain, by relieving Spasmodic contraction and thereby facilitating the action of

Cathartics, and, when combined with ipecacuanha or Tartar Emetic, by direct action to the surface. When there is much fever it is best to postpone its administration until the force of the circulation has been reduced by the lancet. It may be given along with cathartics or combined with ipecacuanha, which sometimes diminishes its stimulant effect and causes it act as a diaphoretic. In the early stage it is best to give it in full doses, at bedtime, so as to procure rest and sleep at night. In the advanced stage it is better to give small doses, at stated intervals, so as to sustain a constant

impression.

Mercury - Not only is calomel useful in the commencement as a purgative, but afterwards also, in small doses, so as to stimulate the hepatic secretory function, and sustain a flow of bile into the bowels. For this purpose it is conveniently combined with the opium and ipecacuanha given at night. If the disease does not begin to yield in two or three days, the mercurial may be more freely administered, so as to effect the mouth. In severe hepatic or bilious cases, and those of a typhoid character, unconnected with a septic state of the blood, it may be carried to

Salivation at an earlier period. When this indication is to be fulfilled, the mercurial, instead of being administered only at night should be given at short intervals of two or four, or six hours in small doses, still in combination with opium and ipecacuanha. The quantity of each ingredient must vary with the peculiar susceptibilities of the patients, and the urgency of the symptoms. The chief cautions to be observed are to stop short of profuse salivation, and to avoid the remedy altogether in those malignant cases in which the blood is dark, and either fully or not at

all coagulable.

Acetate of lead has been employed in all stages of the disease, but is not generally employed in the earlier stages. After sufficient depletion, and a thorough evacuation of the bowels, should the symptoms not yield, this salt may be given with some hope of advantage; but it is best adapted to chronic cases, and to those of an acute character which are attended with considerable hemorrhage. No remedy is perhaps so effectual in the hemorrhages of typhoid or malignant cases. It may be given in doses from one to three grains every two hours, and should generally be combined with opium. Sulphate of Copper and Sulphate

all coagulable.

Acetate of lead has been employed on all stages of the disease, it is not generally employed in the earlier stages. After sufficient depletion, and a thorough evacuation of the bowels, should the symptoms not yield, this salt may be given with some hope of advantage; but it is best adapted to chronic cases, and to those of an acute character which are attended with considerable hemorrhage. No remedy is perhaps so effectual in the hemorrhages of typhoid or malignant cases. It may be given in doses from one to three grains every two hours, and should generally be combined with opium. Sulphate of Copper and Sulphate

Zinc have also been recommended.
These are applicable to the advanced
Stages, and to the Chronic form, when
ulceration may be supposed to have
taken place. They should be given
in ordinary doses, combined with
opium, at intervals of two, three, or
four hours.
Acids have sometimes been found
beneficial. Much notice has been
attracted by Hope's mixture, consisting
of a fluidrachm of nitrous acid,
forty drops of tincture opium, and
eight fluid ounces of Camphor water,
of which one fourth was given every
three or four hours, this remedy should
not be employed when the inflammation

is acute, and attended with fever.

Nitro-Muriatic acid with laudanum may be employed under similar circumstances. The vegetable acids have also been recommended; and cures have been referred to the free use of lemon juice, vinegar, &c.

Among the alterative remedies may also be mentioned Copaiba, and oil of turpentine. Given in emulsion with laudanum, in small and frequently repeated doses.

Peruvian bark has been recommended; but is applicable only to paroxysmal cases, or those requiring tonic and stimulating treatments.

Nux-Vomica has been much employed

by the German physicians. It should never be employed in the acute febrile stage of the ordinary chronic form of the disease. In epidemic dysentery it is asserted to have proved very effective.

Local Remedies. As helps to general bleeding, or in the place of it, cups or leeches are of great importance. They should be applied when the pain is greatest. Fomentations and emollient cataplasms to the abdomen are also very useful, and are rendered still more so by anodyne additions, such as camphor, tincture of opium, and decoction of poppy capsules.

Rubefacients and anodyne embrocations, are also useful in some cases.

Injections of Acetate of lead or Sulphate of Zinc are most valuable adjuvants to the general treatment, after febrile action has been moderated, and especially when the disease is confined to the rectum and lower colon. Acetate of lead is preferable when the affection retains its acute character. Sulp Zinc when it assumes the chronic form, Nitrate of Silver has also been used with great benefit. Summary of the course of treatment. In the simple form, without fever it is often sufficient to give a single dose of castor oil, with or without twenty drop of laudanum. If the case be of a somewhat higher grade, a dose

of Calomel may be given, at the
Commencement, and followed in a
few hours by Castor oil or Sulp Magnesia,
Should the Symptoms increase, and
fever with a strong pulse be superadded
to the abdominal pains, the patient
ought to be moderately bled from the
arm; and, if this condition exists
from the beginning, the bleeding should
precede the other remedies. If the
degree of general excitement be not
sufficient to call for the lancet, Cup's
or leeches may be applied to the abdomen.

The combination of Opium, ipecac-
-uanha and Calomel or blue mass may
be employed at bed-time, and followed
in the morning by a laxative.

If the disease does not yield to this plan of treatment by the sixth or seventh day the mercurial plan should be instituted, and carried to slight Salivation, this State is generally brought about by Small doses of opium, ipecacuanha, and Calomel or mercurial pill, repeated every two, four, or six hours.

If the System resists the mercurial impression, the blistered Surface upon the abdomen may be dressed with mercurial ointments,, This disease seldom fails to yield to this plan of treatment, unless there is considerable ulceration of the intestines. In the event that there is a prejudice against the use of mercury. Some alterative plan of treatment

must be instituted. The choice of the alterative means being directed by the peculiar circumstances of the case.

The course of treatment above indicated applies to dysentery as it ordinarily appears. The bilious variety requires a more immediate employment of mercury. In the severe cases of this kind, Calomel may be given in doses of fifteen or twenty grains daily, or of five grains three or four times a day, until some impression is made on the disease or upon the mouth. The other means above detailed, especially general and local bleeding, emollient applications, and the means for relieving tenesmus, should not be neglected.

In dysentery associated with intermittent & remittent fever, the same course of treatment for the bowel affection, as above spoken off should be pursued, Moreover in these cases the frequency of the paroxysms, [illegible] the [illegible] affection [illegible] in most cases be easily cured,

In the adynamic or typhoid form of dysentery, which is apt to occur when the disease prevails epidemically, [illegible] mercurial purges are not admissible; at least in such cases as exhibit this character at their commencement; the supporting treatment should be instituted in this disease when the depression is great. Chicken broths,

unusual pillies, wine whey, wine and water, & other remedies generally used in these forms of disease.

Diet. In very light cases without fever, solid farinaceous substances, such as boiled rice, stale bread, crackers &c. may be allowed; but in febrile cases, at least in the early stage, the diet should consist exclusively of mucilaginous or farinaceous drinks, which may be rendered more palatable, by sugar and lemon juice, if the patient desires it. Suitable preparations are solutions of gum arabic, and arrow root, thin gruels, infusions of flax seed, slipping elm, and decoctions of barley, rice, sago, tapioca and

Irish moss. After the general excitement has subsided, emetics when may be given; and in cases of great debility, animal jellies and broths.

In convalescence, the patients should, as a general rule, be confined to milk, butter, and farinaceous substances until recovery is confirmed. Great care should be taken to keep the persons of the patients and their bed clothes clean, to remove all excrementitious matters, to ventilate the apartments, and to procure the air fresh and pure, and, as far as possible, to remove the patients from the influences of causes which may have contributed to produce the disease,

An
Inaugural Dissertation
On

Rheumatism

Submitted for Examination
to the
Provost, Regents & Faculty
of Physic
of the
University of Maryland
for the
Degree of Doctor of Medicine
by
Alfred T. Alday
Of
Nassau N. P.
West Indies

Gentlemen.

The following pages are written in compliance with the laws of the University of Maryland, demanding a "Thesis" on some medical subject - previously to my receiving the title of Doctor of Medicine. The author is sensible, as the learned critic will be, - that it abounds with imperfections. He hopes the time allotted, and the necessity of writing will be sufficient apologies for its incorrectness.

"In every work regard the writer's end
Since none can compass more than they intend"

Inaugural Essay &c

The Rheumatic State of Fever belongs to that class of fevers that is attended with local determination. It is peculiar to climates where there are sudden changes of the weather as from heat to cold from moisture to dryness. It occurs most frequently in autumn and spring after very warm or cold seasons. It is a common disease among sailors soldiers and laborers, who from their occupations are continually exposed to the vicissitudes of the weather. Hard drinkers and persons of a robust and plethoric habit of body, with a volatile disposition, seldom escape it, and it sometimes happens, that persons of a weak, relaxed and delicate constitution are affected with it. It generally occurs from the age of puberty to thirty five or forty. It most com-

-monly attacks the large joints, muscles and tendons, and even the viscera themselves are not exempt from the disease. Nosologists have given different names to the disease as it attacks different parts of the animal economy: such as when it attacks the muscles of the chest producing symptoms of pleurisy it is called Pleurodynia Rheumatica: when it attacks the viscera producing symptoms of Dysentery it is termed Enterolgia: when the hips have become the seat of the malady it is termed Sciatica; but all these distinctions promote nothing but confusion affording no practical utility. I shall then consider the disease as a unit, and endeavor to give such a description as may lead to a succesful method of treatment

All writers have divided the disease into the Acute and Chronic forms, but there is another between those two noticed by Dr. Rush under the head of Rheumaticula. I propose to treat of each in the order in which they relate to each other. Firstly - Acute Rheumatism. The paroxysm of an acute Rheumatism is generally preceded by chills and shivering which are soon succeeded by heat, thirst and great dryness of the skin. The patient complains of great anxiety and costiveness. The urine which was at first high colored and scanty now becomes prone to desposit sediment. Pulse hard full and tense. The vessels of the skin spasmodically affected from excess of action; hence the dryness of skin, and stoppage of perspiration. The pain affects the hip joint, knees, ankles, wrists, and muscles, the

latter of which have it much increased upon the least motion or pressure. In point of general frequency, the upper and lower extremities are affected both alike; but the head is less often affected than any other part of the body. There is redness and swelling around the part affected, which sometimes approaches to the nature of erysipelas, and is very painful to the touch. In some few instances where the disease attacked the ankles, the muscular distension, which gives rise to the swelling, has taken place to such a degree, as to pit somewhat like in anasarca. The disease will be sometimes marked with a recurrence or exacerbation of the febrile symptoms, the pains will become more general, and the disease will prove more difficult to cure. The fever most commonly comes on before the pains, but the latter sometimes precede the former some two or three days. The pains seldom go off before the fever has abated, and

now and then they go off together. The patient enjoys but little rest at night, if the fever and pains are the least severe, especially as the warmth of the bed clothes renders them much worse. In this stage of Rheumatism the pains, in general, do not remain stationary, or affect one part more than another, which disposition is always increased by an increase of fever. The pains generally pursue the course of the muscles, and flying from one joint to another, is sometimes attended with the effect of lessening the pain of the joint last affected. It is a remarkable characteristic of this disease, that it seldom terminates fatally. In a few instances it has had that termination, when the trachea has been the seat of the disease. Dr. Rush mentions one or two cases of this kind in his lectures. Suppuration does not often take place, but instead of which, effusions are produced to the great annoyance of the

joint. Sweating sometimes occurs at the commencement of the paroxysm, but does not prove critical or afford any relief. The disease frequently continues for two or three weeks, and as the fever lessens, the pains subside and are left liable to change their situation. The alteration produced in the blood, is similar to that which occurs in pleurisy. I shall next make a few observations on what Dr. Rush speaks of as Rheumaticula; from what I can gather from books the disease partakes of a nature both of the Acute and Chronic stage, but inclines more particularly to that of the Acute. It appears to be nothing more than the Acute Rheumatism protracted to an unusual period, in consequence of which, the system is much debilitated, so that the natural quantity of stimuli keep up a weak morbid action therein. The pulse is synochilla or small, weak and,

quick, with some degree of tension. Thirdly Chronic Rheumatism is an affection of the joints and muscles, which consists in very obstinate pains accompanied with stiffness and rigidity of the parts. In general it is attended with scarcely any febrile symptoms, and but little or no external signs of inflammation. The disease lies deep, affecting those joints that are surrounded by large muscles, that are continually in motion, as the hip joint, &c. The pains are more stationary in this disease than in the Acute, being little disposed to change their situation, or to affect more than one or two joints at a time. Effusions are often produced in the Chronic than in other stages of the disease, which form chalk stones, &c greatly impeding the motion of the joint. The pulse approaches to that of the hyphus, or small, weak, and quick, without tension. The pains here are not increased by the heat of

the bed clothes, nor are they so liable to a recurrence, or translation as in the Acute. Elderly persons and those of a phlegmatic temperament, are the proper subjects of the Chronic Rheumatism. The parts occupied by the disease are not near so painful as in the Acute, but rather a deficiency of sensibility occurs. The natural functions are less often affected by it, than by the Acute. Fourthly. Diagnosis. It has been a common practice among writers of all ages, to specify such symptoms of a disease as were supposed to be peculiar to itself, and which would characterize it from all others. But so variable have diseases become in their nature, and so liable are they to interchange symptoms, that to draw such a line of distinction as would serve as an unerring guide, is a task surmountable by few, who have seen practice of a life, much

of the student, and in fact it is almost impracticable. Indeed, performances of this nature are now known to be of little importance, since it is the state of the system, and not the names of diseases, that are to guide us in our prescriptions. However, in compliance with custom, I shall endeavor to enumerate such symptoms as have been noticed as attendants upon this disease, and which might serve to distinguish it from others. The Rheumatism is more allied to Gout than any other complaint, indeed so great is their similarity, that many have been led into error respecting the two diseases. They however differ in a few particulars. First, as it respects their degree of force. The Rheumatism in general is much more mild in its attacks, is of a shorter duration, returns less frequently, (sometimes not more than two or three times a day during the whole of a person's life), and is much

more easy to subdue than the Gout. It seldom depends upon a hereditary predisposition, and is generally brought on by external causes; but Gout is the frequent offspring of a hereditary predisposition, and arises from internal causes not altogether obvious. The Gout, with a few exceptions, never appears until after middle age, and attacks the smaller joints and viscera; the Rheumatism most commonly appears before that period, and attacks the smaller joints and viscera but seldom. The pain in Rheumatism wanders about from joint to joint more, affecting two or three at a time; but the pain in Gout generally remains fixed, and seldom occupies more than one joint at a time. The part affected by Gout is more susceptible of inflammation, than that affected by the Rheumatism. The concomitants of Gout are likewise different

from those of 'Rheumatism,' as when it attacks the stomach, vomiting, indigestion, and flatulency attends, which seldom or never attend the latter disease. When the Rheumatism, as it frequently does, affects the Os Sacrum and neighboring parts, symptoms will occur similar to those from a paroxysm of 'Nephritis,' but may be distinguished from it by the absence of vomiting, and the liability of the pain to increase upon the least exertion, or movement. It is with difficulty that rheumatic affections of the muscles of the chest can be distinguished from a common Pleurisy, on account of that close connexion which exists between their symptoms. However, from the patients having formerly suffered by Rheumatism, and from the inflammatory diathesis being of a very long continuance, we might then with

propriety judge of the nature of the disease. Rheumatic affections of the bowels may be distinguished from Enteritis, by the pain being less severe, of long continuance, and from the non-occurrence of vomiting. Bloody stools never occur in rheumatic affections of the bowels, nor do they prove infectious, which distinguish them from Dysentery, Scorbutic and venereal affections are sometimes blended with Rheumatism, but they may be distinguished by attending to their concomitants. There is a depraved habit of body accompanying Scurvy, which has never been remarked in Rheumatism. The breath also of scorbutic patients is very disagreeable to the smell, the gums are spongy, frequent nausea and vomiting takes place, symptoms which never occur in Rheumatism. In syphilis

the pains generally affect the middle part of the bones, but the pain in Rheumatism is confined to their extremities, which circumstance will serve to distinguish those two diseases. Fifthly. Remote Causes. All such substances as act upon the body either directly or indirectly, so as to occasion debility, come under this head. The debility induced is either general or partial, and is divided into two kinds, the first from an excess, and the second from a deficiency of action. That produced by the latter cause, is happily termed by Dr. Rush, the debility from abstraction, and is the result of the operation of first Cold on the body. The sedative effect of cold is universally acknowledged by Physicians. It abstracts from the system those agents which keep up in it a natural and healthy action. Hence

the slothful dispositions, languid habits and uncommonly slow pulses generally observed among the inhabitants of cold climates. The pulse of a Greenlander beats only from forty to forty-five strokes in a minute; whereas the pulse of an inhabitant of a more southern latitude beats from seventy to eighty. From the sedative operation of colds we can readily account for the paleness, and those bumps commonly observed upon the skins of persons exposed thereto, from the cessation or diminution of the action of the capillaries; this likewise explains to us the sudden stoppage of hemorrhages from the same cause. The operation of cold on the system is greater when combined with moisture, as has been proved by the unfortunate experience of hundreds of persons living near the sea shore, and from

sailors and soldiers being so very liable to this disease. From long exposure to a damp atmosphere, wearing wet clothes, and suddenly going to a draught of air; when the system is much heated and in a state of perspiration, has repeatedly laid the foundation for this troublesome complaint. Among the innumerable causes which predis-pose the system to this disease, and which might be ranked under the pre-sent head, we find none more common than that arising from a want of accomodation of dress to the various changes of the weather. The absurdity of changing our apparel only with the different seasons of the year must be obvious to every one who reflects in the least upon the unsettled nature of our climate. The greater part of the diseases of spring and autumn, I believe

arise from this source. Secondly. Copious evacuations, whether produced from the skin, bowels, or blood vessels, always induce a great degree of debility in the system forming predisposition, which in many instances have laid the foundation for very obstinate and almost incurable rheumatic affections of the joints, &c. This more frequently happens from the long continued use of mercurial medicines in Syphilis, &c, cases of which have been recorded by some respectable authors. (Vide Nesbit) These are the most frequent the remote causes of this disease, which act indirectly in producing their effect. I shall now proceed to the second class, or those which act directly in producing predisposing debility, namely by exciting excessive action. First. Heat. A moderate

degree of heat is absolutely necessary for the due maintenance of health and life. It acts as a gentle stimulus to the system in producing that degree of excitement that is favorable to the healthy and natural operations of all its functions— But when in excess and long applied its effects on the system are just the reverse; inducing languor, lassitude, and other symptoms of debility; and this manner it often acts as the remote cause of the disease Secondly— Straining, bruises and exercise when carried on so as to induce fatigue, likewise prove a remote cause of the disease. This readily helps to explain to us why the laboring class of people are so very liable to be effected by Rheumatism. Thirdly— Excess in eating and drinking, also a-

too great indulgence of the venereal passions, are powerful agents in bringing on predisposing debility. Thirdly of Predisposition - The debility produced in the system by the various causes just enumerated, universally precedes Rheumatism, as well as every other disease. This might be easily proved by the different symptoms and other circumstances commonly attendant upon diseases in general; such as coldness and shivering, weakness of different parts of the body, and drowsiness together with a weak and quick pulse. Also from the particular time in which they attack, as at night when the system is much debilitated from the different employments and exposures during the day. And likewise the great liability of the system, that has been affected

with it, to relapses. This debility is always preceeded by a preternatural accumulation of excitability, or an increased susceptibility to impression. This is proved from this circumstance, that whenever the body becomes suddenly debilitated by straining, &c the accumulation of excitability instantly becomes so great, as to render the system incapable of bearing the least overplus, or even the natural quantity of stimuli, without having some degree of morbid action excited in it. The frequent occurence of this, as well as other inflammatory diseases, in spring, can be easily explained upon this principle. The system being continually exposed to the inclemency of the preceeding winter, has its excitability much accumulated, which is immediately

acted upon by the heat afforded by the vernal sun, in such a way as to produce the disease. In like manner, the sudden changes of the weather and shifting of the wind, which so commonly happen in autumn, debilitate the system and thereby occasion the disease. The unhappy effects produced on the body by these sudden changes, naturally suggest to us a caution against taking draughts of cold water when it is in any measure heated above the natural temperature. It is a practice but too common, although attended by such pernicious effects. Likewise the custom, after being exposed for some time to a cold or damp atmosphere, of drinking ardent spirits, cordials, &c which acting upon the accumulated excitability produce disease. Seventhly. Of the Exciting Causes

That state of the system constituting predisposition, was formerly considered by Physicians as disease itself; but late and more accurate investigators of the healing arts, have shown it to be only its precursor. For disease consists in action, and that irregular; and predisposition only an increased aptitude to action. It must then be evident, in order that disease should be produced, that certain causes must interfere to excite the system into action, these substances are called the exciting causes. Many instances have been recorded of the body's remaining in a state of predisposition, for months, and even years, without having the least disease produced therein. Indeed, we need only refer to the daily occurence of facts to support this opinion

How often do we not see persons after laboring under debility for a length of time, finally recover from that state without being the least diseased, owing to the exciting causes being withheld? From this fact we learn the possibility of preventing disease in its forming stage. And the prophylaxis consists only in regulating at that critical juncture, the diet, drinks &c of our patients to the state of his system. As it is only in consequence of its being exposed to the operation of adventitious stimuli, that are disproportionate in quantity to its excitability, that such commotions are therein produced as form what is called disease. That disproportionate stimuli acting on a preternatural accumulation of excitability, should produce such

communications in the body, is no new law of the animal economy. We see it daily illustrated in the common diseases of the arterial system. As soon might we expect to see a vessel ride with the same degree of ease and safety in a gale of wind, as in a calm, as to expect that a regular and equal degree of excitement should be produced in the system, as in health, when under the operation of stimuli that are disproportionate to its excitability. The system being then in a state of debility, and its excitability greatly accumulated, we may easily foresee what would happen from exposure to the heat of the sun, or that of a store room; disease will inevitably be the consequence. Heat applied either generally or partially to the body, after it has been exposed to the operation of cold, frequently has this effect. The inordinate use of ardent spirits, particularly at those times, as

I formerly hinted, when the system has been debilitated by the dampness of the weather &c proves a fruitful source of this disease. Exercise continued so long as to produce fatigue, lassitude, strains, bruises, &c frequently induce it. Eighthly - Of the Proximate Cause. As the cure of every disease to which the system is liable, depends wholly upon a knowledge of its proximate cause, it will not surprise us to find, that it has been anxiously sought after by Physicians of all ages. But various have been the results of their researches in this important branch of Medical science. Some attributing it to a labor of the fluids obstructing the vessels, some to a morbific matter in the system, whilst some ascribe it to an acrimony of the fluids, others again to a spasm affecting the extreme arteries. To admit implicitly either of the above

doctrines, without examining into their merits, would be acting in a manner contrary to just reason, and sound philosophy. The acrimony of the fluids to which the proximate cause of this disease has been ascribed, seldom or never exists, and when it does, it is only after the disease has been formed, and continued for a length of time, as in the Chronic Rheumatism. Hence the impropriety of ascribing it to the accidental occurrence of this circumstance. The tentor of Boerhaave exists only after violents, or great defect of action, and appears to be the effect of disease in the one instance, and the exciting cause of it in the other. With regard to the existence of morbific matter in the system, to which Dr. Sydenham and others attributed the proximate cause of this disease, it has eluded

the researches of the most sagacious and attentive observers in medical science; and there are few Physicians that are disposed to favor such a doctrine. The spasm of the extreme vessels, which in Dr. Cullen's opinion formed the proximate cause of this disease, appears equally fallacious. For it is observed to take place in the greater number of instances, after that action in which disease consists is formed. It however now and then co-exists with the disease, and appears to be rather its form, than its proximate cause. The Rheumatism is sometimes so mild as to prevent the occurrence of this phenomenon. The objections I consider of sufficient importance to warrant my rejecting spasm as its proximate cause. Among other medical philosophers that have investigated this bitty

none seem to have come to a more correct opinion, than the following. "It consists in nothing more than irregular, morbid or wrong action, and it is immaterial whether that action exists in the arterial, nervous, lymphatic, or any other system, it still constitutes the essence of the disease. Thirdly. Cure from the history of the symptoms, and other concomitant circumstances of Rheumatism it evidently appears to be of an inflammatory nature, and from that action which constitutes its proximate cause being excessive, and irregular from the loss of equilibrium of the excitement in the system, our indications of cure must then be. First to reduce the excessive excitement. secondly to restore its equilibrium. The remedies that are found

most useful for the accomplishment of these two ends, are 1st bloodletting, 2d sudorifics - 3d purges 4th blistering. On each of these I shall make a few remarks. But before proceeding further it may be necessary to premise, that in the employment of these remedies we must be regulated entirely by the violence of the symptoms, and duration of the disease: for when it is recent and the pains not very great, and no considerable degree of fever attending, mild and less mendicines will be found efficacious in subduing it, such as gentle purgatives and mild diaphoretics &c. It is at this period of the disease when friction is found to be of such great service, its good effects will be always more certain when premise by gentle purges.

But when, as it frequently happens, the febrile symptoms are very high, the pulse hard and tense, the pains almost insupportable, flying from one joint to another, and likely to continue for any length of time, we must then have recourse to more powerful evacuants, as blood letting, cathartics &c. The propriety of withholding stimulating aliment, and such other substances as might aggravate the disease, or in any measure tend to counteract our prescriptions, must be obvious to every practitioner in medicine. The diet therefor of our patients must be restricted, all animal food should be forbidden, likewise all such as are of a stimulating nature and hard of digestion, and panada, barley broth, milk, &c should be substituted in their place. All fermented and spirituous

liquors should be strenuously abstained from. The patient should be directed to take plentifully of mild diluted drinks, slightly acidulated, such as apple and tamarind water &c — Exercise, the warmth of store rooms, and the warmth proceeding from too much bed clothes, should be guarded against, as they frequently bring on exacerbations of the pain and fever. Blood letting is the remedy to be depended most on in this complaint, as it abstracts one of its exciting causes, namely, the stimulus of the blood, from the very seat of the disease, and quickly reduces the excessive and morbid excitement in the system. Its use in this, as well as in other inflammatory diseases, has occasioned some discrepancy of opinion among physicians, with regard to the

proper time and quantity it ought
to be drawn - I should say there need
be no cause for dispute, for should
it be my misfortune to break so trouble
some a malady - I should regulate
venesection, or topical bleeding by the
symptoms present and by the pulse
which, latter, is a most safe index, for
any restrictions of that nature can
only tend to an erroneous practice, by
occasioning an improper limitation
of a remedy that is indispensably necessary
as long as there is the least degree of
tension in the pulse, or any consider-
-able degree of tension in the pulse,
or any considerable degree of morbid
action existing in the system - In
the onset of the disease, though milder
remedies might be resorted to, but
with much less advantage, a few ounces
of blood being drawn will almost in-

-stantly arrest the disease in its progress, and smother all morbid action. It however is almost common-ly neglected at this period, and the general symptoms of fever into be increased to a considerable degree, the pulse accompanied with a great deal of fulness and tension, and the pains very violent, frequently shifting their situation and becoming al-most general; bloodletting is then loudly called for, and nothing acts more like a charm in lessening these disagreeable symptoms than this powerful evacuant. It should be continued into a marked benefit is found to have taken place. At times bleeding at the arm will not suffice then cups or a few leeches applied to the seat of pain, will be found to be a great adjuvant in lessening the

local morbid action. When these measures are timely resorted to, and judiciously applied, we generally find them followed by lessening the spasm of the capillaries, & inducing a copious perspiration, that proves in some degree critical. The pains abate in their severity, and become more limited, affecting only one or two joints. The swelling and redness of the parts that was more particularly the seat of the disease, into disappear in a great measure. But when either from a total neglect, or from a penurious manner of prescribing this remedy, the fever continues to increase, the pulse is depressed from excess of action, and the severity of the pains by no means abating, but becoming rather worse, wandering from joint to joint, and from one

part of the system to another, until at last the brain is attacked, delirium succeeds, with other symptoms truly distressing in their nature, threatening the patients life. And unless bleeding or some other remedy that can produce a copious evacuation is immediately had recourse to, the patient either expires from the oppression, or nature relieves herself by effusions, &c, and the disease degenerates into the Chronic Rheumatism. In Rheumatic la Dr Rush speaks of bloodletting as being successful when bark and other tonics have failed. He says the quantity of blood to be drawn here, must be in proportion to the degree of tension in the pulse, and other concomitant symptoms of the disease. It sometimes

inclines more to the Chronic than to the Acute. Rheumatism, and is unattended by fever - blood letting must then be omitted. I will next speak of Sudorifics - They have been used in most inflammatory diseases with success, and are by some physicians preferred to the lancet - Their operation are considered by some as being more harsh, and their effects more debilitating to the system than that ~~[illegible]~~ remedy, and they frequently fail in affording relief in consequence of which the disease becomes aggravated. It requires caution in their administration, patients being more liable to relapses, from exposure to the atmosphere, after their operation, than from the operation of other

remedies. Their effects are rendered more certain, and less debilitating to the system when preceded by phlebotomy. They are better adapted to the milder forms of this disease, and may with safety be resorted to, when compelled by the prejudices of a patient to forsake more efficacious remedies. A few drops of antimonial wine, given at the time of going to bed, will often induce perspiration, which should be promoted by the warmth of the bed clothes. The Ipecacuanha has been proved by experience of many to be a valuable remedy in both the Acute and Chronic stages of this disease; it not only produces diaphoresis, but it also obviates costiveness. It has been given with marked effect after blood letting —

Pulv Doveri is another diaphoretic much used, it is likewise given to relieve pain and promote sleep, and if there should be any diarrhœa the above drug will suffice to check it - The warm baths has been recommended - Purges - As regards these every practitioner will admit their efficacy in all inflammatory diseases attended with constipation but they must be viewed in the light of auxillaries - I mention among the list, Salph Soda - Jark Potash, but if there be much costiveness I would exhibit such as Pulv Rhei - Jalap - Sub Mur Hydrarg - I will now glance at Blisters — They are of considerable value as they excite external action, by which means the pains of the joints are greatly relieved - Their application

ought not to be allowed to be contin-
-ued longer than is actually necessary
which is from four to twelve hours-
They are of marked benefit in the
Chronic form of Rheumatism.
I will mention a case of Rheumatism
and its treatment which was ad-
-mitted in the Baltimore Infirmary
and treated successfully, and which
will comprise the treatment laid
down in this feeble essay —
John Danney - was admitted into
the Baltimore Infirmary Apl 16th
with all the symptoms of Inflam-
-matory Rheumatism - He was
ordered to be cupped over the
Cardiac region and shoulders —
and take the following prescription
℞ Magn: Carb — ʒß
" Sulph — ℥j
Aqua — ℥vij

Tinct Colchi — ℥ss
Ft. Sol - Take tablespoonful every
3 hrs - also
℞ - Proto: Hydrarg - grs xii
Doveri: Pulv — grs 60
Ft Pil xii - One every night - It will
be seen that the treatment is
purgative, diaphoretic and al-
-terative - Apl 16th, the day fol-
-lowing, the pain in cardiac region
had been subdued, attributable
chiefly to the cupping - on this
day he complained of inability
to use either arm without consid-
-erable pain, for which he was ordered
to be cupped - and continue for-
mer medication - Apl 18th two dys
succeeding he was unable to use his
right leg - the inflammatory action
having been moved by cupping from
the shoulders - again cupping was

applied with benefit over Lumbar
region of left side - This man
recovered on 28th having been
sick 17 days - In venereal Rheu-
-matism Iod Potash has a
marked influence - While cite a
case on which I saw the efficacy
of the drug - May 2d A sailor
was admitted into the Baltimore
Infirmary with pains in all his
limbs, confined somewhat to the
centre of the long bones, which
pain was increased shortly after
getting into bed, which symptom
serves to distinguish Venereal
from other forms of Rheumatism
He had also syphilitic nodes
on the tibia of both legs - with
the history of this mans former
habits and his present symptoms
it was concluded that he had an

attack of Venereal Rheumatism
He was ordered
℞ Iod.' Potass - grs x Ter die
with the exhibition of grs xv
Pulv Doveri, every night - This man
continued this medication for
seven or eight days and was con-
-siderably benefitted - To show how
the Chronic form of Rheumatism
defies all treatment I will give a
synopsis of a case in this House
Patient was at first ordered
Mass Hyd Zj - Opii et Ipecac grs v āā
St. Pill xx - one ter die - complained
of great pain for which he was
given Ext.' Conii grs ij - Acet Ext Opii grs j
every night - No benefit - then a local
application of Tinct Iodine - some
slight improvement - He was then
purged gently with Rochelle Salts.
Zp - Iod Pot grs v ter die - All the

medication has failed so far to afford any relief worth noticing or to give either the patient or medical attendant any very great hope of eventual cure, He was then given Ammon Tinct Guaiac ℥j ter die - under this treatment he made considerable improvement - After a few days symptoms became aggravated - He was then ordered Sub Sulphur - failed - As a last resort he was ordered to use warm baths of Sulphuret Potassium and paint part with Arg Nit Up to this date the patient is scarcely any better than at first - From this, gentlemen, the disease seems to baffle at times the combined influence of blood letting, purges, diaphoretics, alteratives and blisters - Into mention a few cases

which can be found in Woods Retrospect
"Pyro Acetic Spirit in Rheumatism,
"For upwards of 12 mos says Dr. Hastings
I have employed Pyro Acetic Spirit
in Acute and Chronic Rheumatism
and my treatment has been attend-
-ed with success extraordinary, far
exceeding the results obtained from
Colchicum." He goes on to say "I have
not yet seen a case of Acute Rheu-
-matism which has not rapidly
disappeared under its use, at the
same time bringing about an
improved condition of the general
health. Chronic Rheumatism requires
a more lengthened continuance
of its use, indeed it has less power over
this affection than the one preced-
-ing" Lancet Jan 16th 1847.
Section of this Dr finds Acute subdued
by his Pyro Acetic Spts. He winds up by

admitting its inefficacy in the Chronic forms. Hilo mentions a case of Rheumatic carditis showing the efficacy of Acet Plumbi "Mr. H. at 45, a farmer of robust constitution suffered an attack of Acute Rheumatism of the joints, for which he took of his own will some Sulphur. After exposure to cold and wet, he was siezed with a difficulty of breathing, sense of suffocation, pain in cardiac region inability to bear pressure. pulse 130, both small and compressible. Treatment V.S ℥xlix. Sulph Magn ℥j. On following day took one of these powders Sulp ac Plumbi gr iv. pulv Doveri gr v. This was continued for two weeks when he was enabled to walk out. He now complained of pain in joints and spine for which he took Tr Guaiac A. pulv Dover gr x every 3hrs Recovered and has been for 7 years"

Missouri Med & Surg Journal

By oversight in the foregoing pages I omitted to speak of the Cardiac complication - the most frequent complication is that of the Heart's lining membranes viz - pericarditis and endocarditis Bouilleaud was the first to prove that serious organic disease of the Heart occasionally originates from Rheumatism According to that author it occurs more particularly in the Acute form - The period says Dr Wm Pepper is from eight to twenty seven days - Endocarditis is the most frequent, although there is a complication at times - Wood says that in the majority of cases they are subservient to proper remedies - also he adds that the two surfaces of the pericardium coalesce and no evil consequences result - In endocarditis if not checked, disease of the valves ensue, which in time is followed by hypertrophy and

dilatation and ultimately in death.
During an acute attack of Rheumatism
when pain, and oppression is felt in the
precordial region, difficult, hurried
breathing, palpitation, with or without
cough, increased pulse, abnormal expres-
sion of countenance, such symptoms ought
to lead the watchful practitioner to
place the ear and use the valuable
aid of percussion and detect any trouble
that may exist, for if the practitioner
be like one of the "five foolish virgins"
and neglect to use those valuable guides
the disease will make rapid inroads.
Dr Wood advises one to be careful of
an hasty conclusion, for says he Cardiac
murmurs are heard in auscultation
arising from deposition of fibrin.
dependent upon a condition of the
blood, and it is well known that
such murmurs are dependent on anemia

which is not uncommon in Acute Rheumatism, especially in its advanced stages Endo and pericarditis is not a metastasis but an extension of the disease, which is proved by the non abatement of external symptoms. Children are much more liable to this complaint than adults. Pleurisy may be an accompaniment of the cardiac ~~trouble~~ trouble. Cerebral complications sometimes occur pain increased sensibility to light and sound, delirium and coma. All these are symptoms of the existence of Cerebral disease.

Visit

An Inaugural Dissertation

on Epilepsy.

Presented to the Provost Regent.

And

Medical Faculty

of the

University of Maryland

By.

Napoleon. B. Nevitt

Epilepsy

The term Epilepsy is of Greek origin, and was applied by the early Greek authors to signify the suddenness of the seizure; The Romans applied other Synonyms, as Morbus Sacer, because the brain the most Rational part of man was supposed to be the Seat of the disease, Morbus Herculus, on account of the force of the Spasm, Morbus Cadurcus, because the patient when attacked by a paroxysm of the disease was thrown with violence suddenly to the ground; and Morbus Divinus; because the disease was attributed to the interposition of an offended Deity testifying in this manner disapprobation of passing events. Some of the above appellations clearly show with what reverential awe, the ancients regarded the disease; The Romans would immediately adjourn the Senate, and suspend all business when an Epileptic was seized by a paroxysm

op his disease. "The disease is of very remote origin. The oldest medical authors appeared much time and study to it, even Hipocrates who is regarded the father of physic wrote extensively upon the subjects, Thus we may infer that the disease is older than the Science of Physic, It is said that the sick who were taken to the Saviour to be healed were Subjects of this disease; Who, then knowing as we do the nature of the disease, can fail to appreciate the mighty Miricles of the Saviour,

Every one must be aware of the difficulties attending a Consideration of this disease, The learned of the profession, from the earliest dawn of medical Science, down to the present day have devoted their time, talents, and Energies to its study, and that too, I must say, without having

having accomplished much, for we are upon this research almost as ignorant of the Pathology and Etiology of the disease as our forefathers were Centuries ago. Dr Potter Remarked in one of his notes in Gregory's Practice of Medicine, "That take away a few remedies, and a better Knowledge of Anatomy, and nothing has been added to knowledge of the disease since Cullen's famous Chapter on Epilepsy appeared. "Now this may be I can hardly say, but of this facts I am fully aware, that we are yet entirely ignorant of that peculiar condition of the brain which is favourable to this disease, or that condition upon which Epilepsia Cerebralis so entirely depends, and which Cullen makes its proximate Cause.

Knowing these facts, the wary practitioner becom-es discouraged, for he feels as if he is seeking after

after knowledge which is not to be obtained;
many under these circumstances will cease to pursue
the phantom of knowledge, and rest contented in
the chair of ignorance and ease; while their
more industrious but deluded brethren, allured
on by the bright hopes of future reward, will
unceasingly pursue over the hills and dales, and
rugged paths of hard study. And at length return
almost as poorly paid as they who did not pursue
at all; Such seems to have been the result
of those who have applied themselves assiduously
to the study of this disease; But we should
not be discouraged by precedents, While
there is a hope, a possibility of rendering the
Miserable Epileptic less wretched, either by
shortening his paroxysms, or making them
less frequent in their recurrence, "Humanity

Should urge us to use our utmost endeavours in searching after the nature and cause of the disease, and if we should fail in our scientific researches, let us then clothe ourselves in the armour of the Empire, for discovery is yearly adding new remedies to the list of the Materia Medica, And Chemistry refining and rendering more potent those that we already possess, we may with these weapons, at some future day successfully combat this formidable enemy of the human race;

Epilepsy is so well marked by its Symptoms that it will never be overlooked, or confounded with other diseases, even by the most casual observer, although the same Symptoms do not manifest themselves in all epileptics, nor at all times in the same patient, yet they are usually so combined, and so prominent as to render diagnosis easy. The paroxysms as they

most usually occur, present the following Symptoms,
The patient is Suddenly Seized and Thrown with violence
to the ground, while he is apparently in the enjoyment of
perfect health, It is this circumstance that has given
to the disease the appropriate name of falling-sickness,
While in this position the patient is affected with
violent Spasm of the muscles, particularly of the eyelid
-son Muscles, His eyes are fixed and Staring, His brow
Contracted and lowering, The Complexion of some
Epileptics is leaden, in others it is flushed even to
duskiness, The Muscles are in alternate relaxation
and Contraction, the Spasm being what is Called
Clonic, Several instances are recorded of the Spasm
being so violent as to dislocate certain joints at every
paroxysm, Dr Cheyne gives the Case of a girl whose
shoulder was found dislocated after every paroxysm until
it was properly secured by bandage, Burserius

gives an instance of a young Lady whose lower
Jaw was dislocated at every paroxysm, And Seve
-ral authors have noticed the Teeth being broken
out by the violent Contractions of the Muscles that
elevate the lower Jaw. Sometimes the Tongue is
protruded and very severely bitten by the same
movement of the Jaw. The neck appears Swollen,
the eyes Roll, or are fixed in a horrid Spasm,
Rapid Suction takes place, and the mouth is
very much distorted, The abdomen is distended
with flatus productive of borborygmi, The
Diaphragm and abdominal Muscles overcoming the
resistance of the Sphincters expel the faeces and urine
with force, nor is a discharge from the Vesiculae
Seminales uncommon, At first the pulse is
very rapid but not Strong and full, Toward the
end of the paroxysm it is full and Strong.

At this stage perspiration takes place very profusely, particularly about the head and face; the breathing varies, sometimes it is sibilent, sometimes stertorious particularly in the robust and plethoric. At last the breathing becomes full and uniform the violence of the paroxysm gradually abates, and strong muscular contraction gives way to subsultus tendinum, and at last the patient heaving a deep sigh is restored to a degree of recollection, soon after which overcome by the violence of the convulsion he sinks into a profound sleep, from which he recovers unconscious of his attack, unless admonished by a headach, by the state of the tongue, by discovering that there has been an involuntary discharge which experience has taught him to connect with his fits, by extreme exhaustion, or by discolouration

of the skin from ecchymosis; Death has taken place in a paroxysm of Epilepsy, occasioned it is thought by respiration being suspended by a spasm of the glottis, or by congestion of the vessels of the brain, The attacks of Epilepsy are not always attended with so violent a struggle as that above described, It is only when the disease is well set in that all of the paroxysms are so violent, sometimes every symptom is much milder, and a good many absent, The disease often presents the following symptoms, The patient suddenly seized with sickness at the stomach, or great faintness, His sight becomes dim and very uncertain, and recollection lost together with the muscular power so that he falls from his situation, and when his friends run to his assistance, they find him pale and bedewed with a cold perspiration

perhaps insensible but not convulsed,
Where attacks may often be traced to indigestion,
and consequently is often relieved by free vomiting;
There is yet a milder form of this disease, It
is sometimes so slight as to be entirely overlooked
even by the patient himself, This form presents
the following symptoms, The eyes of the patient
suddenly becomes fixed and vacant, If he be
engaged in conversation he tries to prolong it in
a monotonous gibbering manner, The patient often
endeavours to conceal his affliction, it appears
from this that he often has a short warning of
its approach, He continues in this condition
but a short time, And then recovering takes up
the thread of discourse and proceeds as if noth-
ing had happened; Most all patients suf-
fering with epilepsy present one or the other

of the forms above described; I once knew a patient who suffered with this disease from the third year of her age until she was eighteen, when death released her from her sufferings, And who in the course of the disease presented all three of the forms above described, In the early period of her disease the paroxysms were extremely mild so much so, that she would not fall, even, when standing at the time of seizure, but complain of a sleepy sensation, and at the same time lose all power of the will over the motor muscles, And thus remain transfixed to the spot, She would always earnestly request to be laid upon her couch being unable to get there unaided, In this condition she would remain in apparent sleep for a few moments, and then rise perfectly recovered and entirely unconscious of having been sick

"The recurrence of these mild paroxysms were very frequent having four or five in the day and as many at night"; "This mild form of the disease would sometimes be interrupted by a paroxysm more violent than any I ever read of, The convulsion would continue from one to two hours in the most violent manner, The flexor muscles being spasmodically contracted to such an extent as to appear knotted and apparently as hard as bone, The limbs would be tonically flexed upon themselves, and remain in this condition during the whole paroxysm, they could not be extended, even by a force sufficient to fracture the bone, The Jaws were brought together with such force as to severely injure the tongue when protruded, and even to fracture the teeth, The spasm of the muscles of the face differed from that affecting the limbs, being

of the kind called clonic, for there was alternate relaxation and contraction in them causing horrible distortions of the countenance; The Recurrence of this violent form of the disease was very seldom, in the beginning of the disease they would not occur oftener than once or twice in the course of a year, But as the disease continued they recurred more frequently, and at the same time gradually becoming milder, While the frequent and milder paroxysms gradually assumed a more violent form and when she had reached her tenth year of age, they had all submerged into the same kind of paroxysm, It was now perceptible that the disease had made considerable ravages upon the mind, the memory, and the power of perception, both, being injured, The occurrences of every day hardly made any impression upon her, and

even when her attention was attracted, as soon as the occurrence was over, she would cease to remember the event, But would often speak coherently and sensibly of incidents that occurred before her mind was effected, At this period the disease appeared to be governed very much by the changes of the moon, she would pass the intervals between the changes, without having but few fits, But always about the changes of the moon they would recur very frequently. Her disease continued in this manner until she attained her fourteenth year, when Symptoms of Hysteria began to manifest themselves, and gradually increased until it was difficult to say whether the disease partook more of the nature of Hysteria or Epilepsy; The ravages of the disease upon the mind become every day more manifest until a perfect state of

fatuity or Idiocy supervened, which continued
until her death, But for more than a year
previous to this event, she became completely insen
sible, or indifferant to all surrounding objects,
never distinguishing between things, and scarcely
knowing her dearest friends, being also com
pletely inattentive to the Calls of nature; This
condition being so degrading, her friends rejoi
ced when death released her from her suffering;
I have mentioned this case for the purpose of show
ing that the different forms of paroxysm described
by authors, may all exist in the same patient, at
different periods of the disease; And also that
the many exciting causes of the disease, cannot
produce Epilepsy in its true form, unless that
peculiar condition of the brain, whatever it may
be, is present; And that when that mobility

does exist, very feeble exciting causes will produce the paroxism; "What that peculiar condition is, I cannot tell, morbid anatomy does not teach, Cullen remarks in „Aph. MCCLXXXIV. "What the mechanical condition of the brain is in the ordinary exertions of the will, I have no distinct knowledge, and therefore must be ignorant of the preternatural state of the same energy of the brain under the irregular motions here produced„ The Brothers, Wenzel who had the opportunity of examining the brain of more than twenty subjects dead of this disease, came to the conclusion that the seat of the disease lay at the Sphenoid bone, at the Pineal and Pituitary glands, In all of the cases examined by them, they found the Sphenoid bone to be preternaturally thin, so much indeed as to cause a deformity of the Sella Turcica, but the five glands

presented different appearances in different subjects as regards colour, consistance, and size, in some the glands were soft, in others preternaturally hard, the colour varied from a pale red to a black tint, In some they were enormous in size, in others preternaturally small; The investigation of these cases did not add much to the Pathology of the disease, they only opened a new field of study that may at some time yield a reward, In some dissections, exostosis or thickening of the bones have been discovered, but this may be a consequence rather than a cause of the disease, In others, inflammations and ulcerations of the membranes of the brain, of its surface or substance In others vascular turgescence, effusion of various fluids — as bloody, serous, gelatinous, and purulent, Indurations or softening of the brain; Tumours are sometimes detected, as scirrhus, fatty, or sarcomatous, And sometimes tubercles and hydatids are found, But in none has dissection thrown any light on the peculiarities which distinguish the convulsive

from the other varieties of Encephalic disease, The dissections that have been made, show that there exist such a variety of appearance in the brain, as to render it impossible to form a correct idea of its appearance at the begining of the disease or at what part of the brain the disease commenced;
I presume we might learn more of the pathology of the disease, if we had more frequent opportunities of examining subjects upon whom the mad but lately commenced, and who died by some accidental, for I have no doubt but as the disease continues, its ravages become more and more manifest upon the brain, until it presents the appearances heretofore seen
Epilepsy has been divided into Idiopathic and Sympathetic, Bouillon's Classification embraced another species, the Epilepsia occasionalis, but this species is now considered as merely convulsion symptomatic of other disease, The Idiopathic

species, embracing the cases which depend upon an affection of the brain, and the Symptomatic, the cases which depend upon an affection of parts remote from the brain, It is not always an easy matter to distinguish between Epilepsia Cerebralis and Epilepsia Sympathica, The rules laid down by authors for discriminating, are by no means to be implicitly relied upon, The rule laid down by Cullen is often known to fail, it is, That in Epilepsia Cerebralis there are no premonitory symptoms, While the Epilepsia Sympathica is generally announced by the aura Epileptica The best manner to determine to which species a of epilepsy belongs, is to proceed in the following manner, First, we may enquire into the state of the natural functions, The state of the appetite, digestion and nutrition, And into the condition of Secretion, and excretion, Then into the state of the nervous

system, And if the patient be a female, into the uterine functions, particularly that of Menstruation, If after these inquiries we are unable to detect any derangement in the above functions, we may with much safety consider the disease to be the species epilepsia cerebralis, Our suspicions will be more strongly confirmed if we discover that the disease is inherited, or that some of the cerebral exciting causes mentioned by Cullen are present, This writer remarks in Aph MCCXCIV. "That a certain fulness and tension of the vessels of the brain is necessary to the support of its ordinary and constant energy, in the distribution of the nervous power; So it must be sufficiently probable that an over distension of these bloodvessels may be the cause of violent excitent;" As this

doctrine yet holds good. We may next enquire if the patient has been liable to excessive congestion of the brain from determination of blood to the head, or increased action of the arterial action within the cranium, or obstruction in the system of the veins, to be inferred from flushings of the face, throbbing of the temples, vertigo, epistaxis, tightness across the forehead, headache, false perception, &c. That there is anything peculiar in the form of the head, or expression of countenance, and that the habits of the patient have been such as to produce much, and long continued excitement of the brain, If we discover any, or all of the last named conditions to be present we may almost positively declare the disease to be Epilepsia Cerebralis

"The Epilepsia Cerebralis Sympathica has been divided into five species, named from the

disordered or diseased organ which is supposed to be the cause of the disease. They are, 1st. Epilepsia stomachica, 2 Epilepsia Hepatica, 3 Epilepsia Verrosa, 4 Epilepsia Uterina, 5 Epilepsia Dolore, It is necessary to say a few words concerning each one of the species here laid down; First the Epilepsia Stomachica has Symptoms of indigestion, such as a loaded tongue, acrid eructations, unpleasant taste, Cardialgia, high colored urine, and foul discharges from the bowels,, The Appetite is Capricious, Sometimes it is defective, Sometimes Canina, while the demand for food is very great it will lay in the stomach for two or three days undigested, This is frequently the case about the time of a paroxism shortly after which, Sometimes enormous quantities of food is thrown up. 2d Epilepsia Hepatica, In this species the liver rather than

the stomach, appears to be the seat of disease, the symptoms are, fulness and tenderness of the right hypochondrium, the complexion is changed to a very yellow hue, just before the time of a paroxysm some authors have seen symptoms denoting a chronic disease of the organ, these cases generaly yield to an alterative Mercurial treatment: 3rd Epilepsia Nervosa, In pursuing the investigation we ought to ascertain, if the patient is a female, whether she has suffered with, or is suffering with symptoms of hysteria, whether she has been liable to palpitations of the heart, Sudden failure of strength, fainting, without loss of consciousness, or any of the more palpable signs of hysteria, as Globus or Uterus Hystericus, and even if none of the above symptoms be actually present, the causes that produce hysteria may have been in operation,

as long and continued exposure to cold and dampness together with insufficient food, and sedentary habits. The symptoms that no one would hesitate to call hysteria in the female, are sometimes seen in the male subject who are of a nervous or hypochondriacal temperament, and hence as both sexes are liable to this species, it has been termed Epilepsia Nervosa, instead of Epilepsia Hysterica, L. Sp. Epilepsia Uterina, When derangement of the uterine function is the exciting cause of Epilepsy, the disease then partakes of the nature of simple derangement of the uterine organs, for instance when obstructed menstruation, or dysmenorrhoea causes Epilepsy, the paroxysms arise and return about the period of menstruation, and will even sometimes arise from the same causes that produce obstructed menstruation, as damp and cold feet, excessive agitation, great anxiety of

of mind &c, This Species differs from the Third, both in its predisponent and exciting Causes, and in the mode of treatment; 5th. Epilepsia Dolore.
This Species of the disease very rarely occurs, cases of it are recorded, as arising from injuries in which the nerves are wounded or lacerated, and from disease of the nerves, It has also been known to arise from, or caused by disease, or Calculus in the Kidneys, one case is recorded of an epileptic who after a violent paroxysm, voided five Calculi, and whose convulsions ceased until other stones were formed; The above division is taken by Cheyne; admirable Chapter on that disease,
Having occupied so much more space already than I intended, that I can say but very little concerning the Causes of Epilepsy, But as it

is impossible to lay down the correct principles of treatment without knowing something of the causes leading to the disease, I will now speak in a brief manner of some of the most important of the predisposing and exciting causes of this disease. The Proximate cause of Epilepsy is very obscure for so many different conditions of the brain is discovered in those who die of this disease as to make it impossible to say what must be the state of this organ to produce the disease. It is known that convulsions similar to Epilepsy can be produced by the application of an irritant to the sensorium. It is said that convulsive action is dependent upon the Spinal cord and the nerves emanating from it, and as in every part of the frame is agitated during a paroxysm, all the external senses morbidly affected just before the

paroxysm, the whole muscular system agitated during the paroxysm, And as not only the animal, but the vital function is universally disturbed, the proximate cause must be situated not only in the Brain, but also in the Spinal Cord, upon the mutual action of both is required to exercise such an influence over the whole body. But the peculiar condition upon which the disease depends, will probably never be discovered, It can not be vascular turgescence, since convulsion is often the consequence of loss of blood, which is removed by stimulants, It cannot be vascular collapse since convulsion often depend upon Plethora, and is relieved by spontaneous hemorrhage, or bloodletting. We cannot discover the first link of morbid catenation and thus discover how the disease begins, It was thought that the

that the true Epilepsies was an irritation that first takes place in the sentient extremity of a nerve and was thence conveyed along the affected nerve to the sensorium, which is thus thrown into disturbed and irregular action, influencing the whole body, but a better knowledge of Anatomy and Pathology has taught us that the cause is not an irritation of a nerve in the part in which it seems to arise, for then it would follow the course of the nerve instead of passing along the integuments at a distance from the nerve, But it is a reflex action, caused by a morbid process going on in the brain: It is a mere Symptom of an unexplained disorder of the Sensorium Commune;

The Predisposing Causes, By the Early Authors, the predisposition to Epilepsy was supposed to depend upon a certain mobility of the

brain, a peculiar liability to excitement and collapse, a liability to be influenced by those causes which are applied to most persons with little or no effect: But it is now found that epilepsy occurs in a large proportion of cases, in those who do not give away to strong emotions, upon slight impressions and who pursue every purpose with a manly constancy: Dr. Cheyne considers that epilepsy is as certain a manifestation of the Strumous dia thesis, as Tuberculan Consumption, Psoas abscess, &c which are inherited from Scrofulous parents, and that he never saw a case of cerebral Epilepsy in a patient who did not appear to inherit a strong disposition to Scrofula, The predisposition to epilepsy was thought to be strongly hereditary, but according to the Statistics of M. Lucas who treated 106 cases found that only six of the whole

of the whole number were of parents who had Epilep
sy, So I suspect the disease is not so Strongly Hereditary as was formerly supposed; Malformation, or defect of Symmetry is a frequent predisposing
Occasional Causes, There are certain vices that will aggravate, and even create a predisposition to the disease, as debauchery of all Kinds, the habitual indulgence in intoxicating liquors, and above all the most powerful is Masturbation, I have myself seen five or three patients who brought the disease upon themselves by indulging in this demoralizing, and degrading habit; Fright is said to be an exciting cause of the disease, overfatigue, Strong Mental emotions, as Joy, Anger, Terror, Grief, disquiet, exhaustion of mind &c Also Suppressed discharge, repelled diseases, obstructed bowels, painful Menstruation &c Epilepsy is frequently caused

by imitation, in churches and particularly in female schools it has been known to extend to several of the scholars who had frequently seen paroxysms of the disease; Derangements of the digestive apparatus, and irritations in the Alimentary Canal, as worms, and teething, have been known to produce the disease, The above are the most frequent exciting causes of Epilepsy, The disease may be distinguished by the following Symptoms, It it commences with a Scream, and is characterized by insensibility and Convulsion, and foaming at the mouth, and is ended in Sopor, the tongue being much bitten, & when the above Symptoms are all present we may say with certainty that it is a true Case of Epilepsy: In making a prognosis we are first to ascertain upon what the disease depends. If we find it to be Cerebral Epilepsy

The prognosis is extremely unfavourable for remedies will exert but little influence over this species of the disease, Cerebral Epilepsy is attended with more danger than the nervous, The nervous than the Gastric or Hepatic, And these than the uterine, But we must not forget that the Sympathetic species of Epilepsy may by repetition acquire the character of the Idiopathic and be attended with equal danger, In some Cases of Cerebral Epilepsy the first paroxysm has proved fatal, where the paroxysm is extremely violent, death may be caused by extreme exhaustion, or by producing Apoplexy, hence Coma after a paroxysm is truly alarming as it shows that Apoplexy has begun, The probability of the return of the fits is also greater in the Cerebral form, than in the Nervous or the Nervous than the Hepatic or Gastric &c

the most favourable form in which epilepsy occurs, and which yields most readily to treatment, is the species known as Epilepsia Lacteina,

As regards the treatment of Epilepsy, it is scarcely necessary for me to say, that when the disease is Idiopathic remedies exert but little or no influence upon it, The best directed efforts of the practitioner almost always fail to produce a cure, this no doubt is owing to our ignorance of the condition of the brain, or of the morbid process going on there which gives rise to the disease, hence our efforts can only succeed in palliating, or alleviating the sufferings of the patient. Most of the species of Epilepsia Sympathica have been cured when treated in the early period of the disease, but even here our best directed efforts often fail, and if the disease continues until

until it becomes habitual it seems to partake of the nature of Idiopathic Epilepsy, and becomes equally as unyielding to the influence of remedies hence the importance of treatment at an early period of the disease. It is not my place here to lay down the treatment to be pursued in cases of Epilepsy depending upon diseased organs, nor were I to attempt to do so, it would be a useless consumption of time that I can but ill spare, and also render this article tedious to those who are to inspect it; It is sufficient to say, that in cases of this kind our treatment should be directed to the condition of the organ, and if we can succeed in restoring health and vigor to the part; the cause of Epilepsy being removed the paroxysms will cease to recur,

The treatment of Epilepsy resolves ~~itself~~

into the measures to be adopted during the paroxysm, and those adopted during the interval between the paroxysms. During the fit we are to provide against the risk of injury from the struggles and contortions of the patient, and to mitigate the violence, and shorten the paroxysm, "The patient should be placed in bed, his clothes, and all bandages loosened, his head elevated, so the blood may freely pass from his head. If there be symptoms of congestion of the brain, cold water, or cloths wrung out of cold water must be applied to the head, and if the extremities are cold, warmth may be applied to invite the blood to those parts. For the purpose of shortening the paroxysm Dr O'Meara recommend salt to be crammed into the patients mouth. I suppose the efficacy

of this agent is exerted through the medium of the gustatory nerves. Dr Watson tried the experiment and found the paroxysms of those to whom he administered the remedy were much shorter than those in other words. Emersion into warm water, will often stop the paroxysms of children particularly if the extremities are cold, Blood-letting is a remedy that was once much used, and that too with much mischief. It is now only employed in cases where there is active excitement, or congestion of some important part: or where there is symptoms of Apoplexy, or Cerebral plethora, if any or either of these conditions be present, blood-letting, general or local as the case may require will act beneficial in aborting the paroxysm, but some caution is necessary as regards the amount

the to be taken, for if more is taken than is absolutely necessary for the relief of the symptoms, its bad effects can be seen upon the system for weeks. During the interval, our object should be, to prevent the recurrence of the paroxysms, this end is attained, when it is attainable at all, by removing the predisposition to the disease on the one hand, and by protecting the patient against the exciting causes on the other, There are certain predisposing causes that cannot be got rid of, such for instance as the inherited tendency, the Strumous diathesis, malformation of the Examinum, &c When either of the above conditions are the predisposing cause to the disease, no kind of treatment will be of much avail, The rational plan of treatment should in all cases be

directed to the general condition of the patient, we should ascertain whether there be any deviation from the natural standard of health, towards general plethora on the one hand, or emptiness and undue asthenia on the other, and adopt our treatment as the case may require. The first of these states may be redressed by Regimen and proper exercise, by abstinence from stimulating food and drink, by slender diet, and if needed, by direct depletion. The Second condition, that is Asthenia, which is probably the most common of the two, and which often leads to local plethora, may be removed or lessened by a tonic and gently stimulating plan of treatment. The object in both cases is to restore the System to its pristine healthy

condition. And thus give stability and firmness to the nervous system, and also diminish that mobility to be impressed which is a strong characteristic of this class of patients. Having thus laid down the indications to be fulfilled in the treatment of this disease, it is necessary to state in a brief manner how they should be applied. When the patient is young, strong, and plethoric, the pulse full, and there is some fever, or where there is a suppression of some natural discharge accompanied with general excitement, bloodletting is necessary. This should be continued, and repeated until the preternatural plethora, or excitement of the system is reduced, at the same time cathartics are useful agents. After general

depletion has been carried far enough, and there still remains local inflammation or congestion in any part, it may be relieved with cups and leeches. I have seen the revulsive effects follow the insertion of a seaton in the back of the neck of a patient who suffered with congestion of the vessels of the brain. If the skin be dry and hot, Antimonials must be employed, the best of which is the Tart. Antimony. or Pulvis Antimonialis. When the secretions are soundly performed by the different organs, a mild mercurial course must be employed. Strict attention should be given to the condition of the bowels they should be kept open and regular, and the patient kept upon an abstemious regimen. The above means when judiciously

employed will succeed in restoring the sys-
tem to its normal condition when none else.
But on the other hand when the patient is
anaemic, pale, and weak, and unduly suscep-
tible to impressions, The active treatment-
will be very injurious, Our best hopes
then lie in means and remedies calculat-
ed to strengthen and invigorate the system,
one of the best remedies for this purpose
is the cold shower bath, This will give
permanent strength and firmness to the
nervous system, The best test of the ton-
ic and embracing effects of this remedy
is the occurrence of a pleasant and general
glow after every application, But if the
powers of the system become depressed
and do not soon rally after the application,

the remedy must be immediately suspended.
Tonics are also agents from which we may
expect much in this condition of the system
when the function of nutrition is depressed
and the blood impoverished. The Preparations of Iron are decidedly the best and most
reliable agents we have. Other tonic agencies
are demanded, when the system is in this
anemic condition, such as the Sulph Quinine,
the bitter tonics, proper and well directed
exercise all largely contribute to give tone
and vigor to the system. The diet should
be nutritious, but at the same time should
consist of articles of easy digestion.
There are certain articles that have been
long used as specifics in Epilepsy. The modus operandi of their action is not known.

The first and best of these is the Argenti Nitras, this article has long been employed in the treatment of this disease, and has been more often successful than any other agent of the Materia Medica, upon which its specific power depends is not exactly known, but it certainly does often exert wonderful influence over the disease. But it is subject to one inconvenience, that of producing permanent discolouration of the skin: it is only when the drug has been continuously used for a long time, that it will produce this effect; It is said that this may be obviated by discontinuing the use of the drug for a few days after having used it for two or three months At best to commence with gr. ½ doses, and increase up to gr iv. or gr v. three times a day.

The Cupri Sulphate & Ammoniu. Is an article that has been employed with some success, but it is not so valuable as the Nit. Silver. it is best given in the form of pills two or three times a day. The Preperations of Iron have been classed by some writers among the Specific agents, but as their manner of action is known, and as it is only in Asthenic Epilepsy that they are useful they are entitled to a higher place, and deserve to be ranked in the rational treatment of the disease, The Sulphate Cupri has occasionally succeeded in curing the disease. but it is now but little employed Also the Sulphate and Oxides of Zinc, Dr Rush highly extolled the Acetas Plumbi but it is not of much value.

Turpentine is an agent of much value, particularly when the disease is depending upon worms in the Primæ Viæ. It is also thought to exert some salutary influence upon the nervous system, Opium and Belladonna are useful in cases attended with much nervous excitement, And Digitalis when the disease is complicated with affections of the Heart. It has been suggested that Chloroform might be an agent of much value in this disease, but experience has not yet proven it to be such, Scutilaria, Valerian and many other articles have had their advocates, but have all been cast aside as worthless. Such is the unconquerable nature of this Malady that our brightest hopes are often foiled,

even under the most favourable circum
stances, With these remarks I will
conclude this Tedious dissertation, and
humbly submit it, to the examination
of the Faculty, of the University of
Maryland

An

Inaugural Dissertation

on

Scarlatina.

Submitted to the examination

of the

Provost, Regents and Faculty of Physic

of the

University of Maryland

for the

Degree of Doctor of Medicine

by

James Hamner Butler

of

Maryland.

1857.

Scarlatina is a contagious febrile disease, characterized by an eruption of a peculiar character, and by irritation or inflammation of the fauces.

The disease; although doubtless existing from a very early period, was not recognised or described as a seperate disorder as soon as some of the other exanthematous maladies. The names of "Rubeola Rossalia" and "Morbilli Confluentes," which are mentioned in some of the works of the older authors on medicine, show that though the disease prevailed during their time, yet it was confounded with, or mistaken for, Rubeola. This mistake need not now in our day and time occur, as there exists between the two diseases certain broad marks of distinction.

The eruption of Scarlatina, comes

ot on the second day, is of a bright red colour,
and is diffused more or less generally over
the surface of the body. In Measles it makes
its appearance on the fourth day, and is of
a darker colour, more elevated, and arranged
in a crescentic form. Redness, inflammation
and ulceration of the throat, so common in
Scarlatina, are wanting in Measles: and
lastly, the catarrhal symtoms which usu-
ally proceed an attack of Measles, are not
of common occurance in Scarlatina.

Scarlatina is not so liable to be
confounded with Small Pox, the later
appearance of the pimples or papulae, with
their hard points and red bases, being
sufficiently characteristic of this last affection

From the affection named Roseola
it may be discriminated by the eruption or rash

or that disease being of a brighter hue, occurring in patches more regularly circumscribed, and it has been asserted, making its appearance first upon the extremities, being unattended by sore throat; and the accompanying fever and general disturbance being very trifling.

Scarlet fever usually begins with febrile symptoms more or less strongly marked, such as debility, lassitude, pains in the back and limbs, heat and thirst, headache, frequently delirium, sometimes nausea and vomiting. Sore throat is usually one of the first symptoms and of which the patient may first complain: and upon inspection there will be discovered a diffused and uniform redness of the fauces, or perhaps the tonsils and palate may be seen to be covered with whitish exudations or crusts

The state of the tongue in Scarlet fever has received much attention. It is covered from the first with a thick white coating, through which the inflamed red and enlarged papulae are seen projecting; this appearance has been denominated the "Strawberry tongue" and is characteristic of the disease.

The skin, from the excessive injection of its bloodvessels becomes morbidly sensible, hot and dry, and its temperature somewhat increased, having reached it has been ascertained 106° Fah.

The eruption of Scarlatina begins usually on the second day, it consist at first of a number of minute red points which rapidly become numerous and coalesce until the whole surface appears of a uniform red colour. It first appears upon the face and

neck, and then gradually extends to the extremities Sometimes but rarely its course is the reverse of this, invading first the extremities, and then the trunk and face It is exacerbated by coughing, crying &c, and usually towards evening by the augmented fever. It usually abates of a darker colour in the groin and flexures of the joints. The redness may be removed by pressure, but returns again immediately

In some cases mingled with this eruption or rash, Sudamina or vesicles containing a clear watery fluid may be discovered, they have no red bases and when looked upon perpendicular to the skin on which they stand might readily be overlooked, viewed sideways they look like so many drops of water, and by passing the hand over the part, they may

be felt to roughen the surface, they occur mostly upon the Thorax, along the sides of the neck, and in the axillae; by degrees the limpid fluid is absorbed, and the cuticle dries in whiteish powder.

After the eruption has lasted four or five days it begins to fade away in the order of its approach, and by the Eighth or Ninth day has disappeared. Desquamation of the cuticle then begins, in small scales or scurff from the trunk or body, and in larger flakes from the extremities. It is often attended by tenderness, and sometimes by itching or irritation. Cases have been reported which have occured during the prevalence of this disease, which have had all the symptoms, run the same course, and been remediable to the same treatment, and in

which all signs of the eruption have been wanting.

The accompaning fever, either Inflammatory or adynamic, is subject to much variety - from a mildness scarcely amounting to disease up to the highest point of danger, it does not abate upon the appearance of the eruption, but continues its course with various degrees of violence.

The cause of Scarlet fever is probably specific, and has generally been believed to be of a contagious character, although not very strongly so, as many persons undoubtedly are exposed to its contagious influence without contracting the disease. No age is exempt from it, although children are much more liable to it than adults so that it has usually been considered a disease of childhood; the susceptabelity appearing to

[illegible] it has been affirmed that Women are more liable to the disease than Men, this may be the case, and if so the explanation would appear to be, that Females existing in the capacity of Nurses, are more exposed to the contagious influence of the disease.

The disease has been asserted to have been produced by inoculation, with the fluid from the vesicles, which are sometimes found intermingled with the rash, as well as by the secretion from the Throat, and by blood drawn from a patient labouring under the disease, but in all these cases the disease if produced was not modified in character or mitigated in severity, and consequently the practice of Inoculating the disease, so useful in another exanthematous disease is useless in this

As a general rule the disease occurs but once in the same individual, exceptions to this have been noticed and recorded, but these are exceptional, and it is highly probable that many of the cases reported are wrong, the former attack being one of some other exanthematous disease, and not true Scarlatina.

Scarlet fever has been divided into three varieties, differing as regards their symptoms, course and treatment.

Scarlatina Simplex, in which there is only a florid rash and fever, and no, or very little affection of the throat.

Scarlatina Anginosa, in which together with eruption and fever there is a decided affection of the fauces, and—

Scarlatina Maligna, in which the inflammation of the throat is the most prominent

symptoms, and the whole system evinces a great degree of weakness and debility. The term Malignant has been truly applied to this form of the Disease.

Cases are not unfrequently observed in which all these forms appear to be blended together, so that it is almost impossible to say to which variety it belongs. It must be said that either the simple or the anginose variety, may during its course, take on the Malignant character, and the most deadly form, may be contracted from a patient laboring under a mild attack: and the same way a person exposed to the contagious influence of Scarlatina Malignant, may have only Scarlatina Simplex. The period of incubation in either case lasting from three to Eight days.

Scarlatina Simplex:— The first symptom which attracts attention is some slight febrile movement, which may be aggravated towards evening, and the appearance of a florid rash, sometimes appearing only as a slight blush, and occasionally limited to the face and neck, but in other cases the heat of skin is very great, the eruption well developed, the pulse frequent, and delirium may even occur especially during the exacerbation of the fever

Complete and intense eruption from inflammation of the fauces is rare even in this form of the disease, therefore in the inspection of the throat some redness may be detected, but as a general rule this parts is white, the patient being sometimes not confined to bed, and unless from some intercurrent inflammation or concealed malignant tendency there is little

danger to life.

Scarlatina Anginosa:- is a more strictly inflammatory form of disease, there is a greater degree of chilliness, followed by headache, thirst, and heat of skin, and to this is added a marked effusion of the peritoneum and constriction of the voluntary powers, nausea, retching vomiting &c.

The eruption is usually well developed, but not always so, sometimes appearing as if confined to particular spots, or if general it may suddenly disappear, and then reappears after a variable length of time. The accompaning fever is more intense and subject to greater exacerbations, usually towards evening, during which time delerium is common. The Pulse is usually high from One Hundred to One Hundred & Twenty. The inflammation of the fauces & tonsils is prominent and observed from the beginning

Patches of lymph may be deposited there of a
dirty white or yellowish colour.

Ulceration of the fauces sometimes exists
and imparts an offensive odour to the breath.
There is usually more or less swelling of the Parotid
and Submaxillary glands, it may be quite
extensive, preventing the patient from opening
his mouth sufficiently for examination. The
Tonsils are sometimes affected from an extension
of the inflammation, and then embarrassment
of breathing will be observed. Diarrhea and
Gastro-Enteritis are not of unusual occurance
and appear to bear some relation or connection
to the diseases in the throat

Partial deafness is apt to arise, from
inflammation of the Eustachian Tube. Inflammation
of the Eyes also sometimes exists. This variety is
much more dangerous than the Simple, but under

proper treatment not necessarily fatal.

The third form Scarlatina Maligna, Angina Maligna, or the Putrid Sore throat, so called from having been first described as a separate disease by Dr Fothergill in 1748, is much more dangerous than the other varieties

Early in the attack the patient evinces an appearance of dejection or alarm which is strongly marked on his countenance. The fever appears to be more of an adynamic character, reaction being feeble and imperfect and associated with low delirium, stupor and feeble circulation. The Pulse is small and irregular. The Teeth & Tongue are covered with black or brown incrustations. The Eyes are much injected

In these cases the eruption, if it appears at all, is of a dark hue or purplish colour, frequently interspersed with petechiae; [illegible] is

appearing, and may disappear and reappear several times. The State of the throat & fauces in this variety is full of evil. The throat is covered with thick viscid mucus, and the whole surface of the mouth of a dark red, inclining to a purplish colour. Ulceration or Sloughing of the Nostrils is common

The Mucus membrane of the Nostrils becomes affected, and acrid matter flows from them, irritating the alae nasi and upper lip. Some of the Secretion is also swallowed which gives rise, or conduces to the production of the irritation of the Stomach and bowels, and the smarting Diarrhea which sometimes excoriates the Anus. True gangrenous scabs and ulcerations often form in the throat, the breath from such cause becoming very fetid

The Parotid, and other glands in the

neighbourhood would sometimes enormously, rendering it difficult if not impossible to open the mouth, and by the constriction which they produce upon the neighbouring vessels, prevent the free return of blood from the head, thereby tending doubtless to produce the Coma so often met with.

The breathing is sometimes greatly impeded by the mucus which collects about the fauces of Air passages, and which the patient is unable to expectorate or swallow. Deafness is not an uncommon symptom in this variety of the disease, the inflammation extends from the mouth along the Eustachian Tube, rendering impervious the Tube or causing inflammation of the Membrane Tympani. Blood may be exhaled from fissures between the Tongue. Bloody urine, or Blood passed from the rectum

may also occur, and are regarded as signs of a fatal termination.

Cases sometimes occur during the prevalence of Scarlatina in which the symptoms appear at once to be overwhelmed by the force of the disease. The patient being attacked with dizziness, faintness and anxiety, the pulse small weak and irregular, the respiration hurried and irregular. Complaint may be made about uneasiness or pain about the region of the heart, the mind which was first alarmed and anxious soon becomes delerious or indifferent, and sinks in soporous unless which the patient usually expires. To such cases the term "Congestive" has been applied.

The diseases which may follow after an attack of Scarlatina are numerous, unpleasant and dangerous. Sometimes delicate children, who have suffered from the disease

fall into a state of permanent ill health, and become affected with abscesses which form in the vacinity of the Parotid & Sub-maxillary glands, which are often very large and exhausting. There is often form within the Ears, giving rise to great annoyance & distress. Inflammation of the Ears is often common, the discharge from which is very distressing. Sometimes an abscess opens into the Ear, and destruction of the bones of the Ear has been noticed as the result.

In strumous habits the fire thus lighted up, smoulders on, or if it ever goes out is readily rekindled, and from time to time there may be a discharge of Pus from the external Orifice, until at length the inflammation is propagated from the Ear to the membranes of the Brain, giving rise to Acute Phrenenzitis

cases of this kind have been frequently noticed and reported, in which the patient had escaped the first effects of the disease, but had afterwards been subject to constant annoyance from the discharge of matter from the ear and which finally terminated in the manner referred to, years in some instances the intervening. In other instances the inflammation which has been propagated from the mouth, has occasioned ulceration, and then occlusion of the Eustachian Tube giving rise to great deafness

Inflammation of the Eyes and Eyelids is not uncommon, and chronic Ophthalmia has been traced to its source in Scarlet fever, Bronchitis, Diarrhea, Orchitis, Rheumatism and even Phthisis has been known to follow this disease, but perhaps the most common sequel of Scarlatina is Anasarca, accompanied

often with Dropsy of the large serous cavities.
So often has this been noticed as a consequence
of Scarlatina that some authors have combined
it in their definition of that disease.

It occurs generally during the period
of desquamation, and perhaps oftener after
mild, than after severe cases of the disease; from
the fact, probable that persons may not use
the same precautions during convalescence, to
prevent exposure to cold, after mild, as after
severe cases although Dropsy has often su-
pervened when no exposure to cold could be
shown. Fatal effects sometimes follow
from effusion of serum into the Sub mucous
cellular tissue of the glottis, death by Apnoea
then ensuing. The Dropsy is accompanied by
scanty, albuminous, sometimes bloody urine,
and depends upon inflammation or congestion

of the Kidneys. Bright's Disease of the Kidneys often follows this eruption. It may be apprehended if at any time during Desquamation or Convalescence, the Urine becomes scanty, altered in appearance and albuminous, the face pale and stuffy, the Eyelids oedematous, and the patient experiencing a sense of languor and distress.

Sometimes during the progress of the Anasarca, headache, dilatation of the pupils of the Eyes, convulsions or stupor occur, and give very strong assurance that effusion has taken place within the head. During the prevalence of Scarlet fever, Dropsy has sometimes suddenly occurred after exposure to the contagion of the epidemic, having preceded by no eruption whatever; the virulence of the poison, it has been supposed acting directly

upon the Kidneys

The anatomical changes detected after death are various. Of the eruption sometimes every trace of it disappears, or remains of it may be found in the purplish or blackish spots round the neck and on the chest. In the fauces the redness often remains, and concrete ex=-udations are there found extending sometimes down the Oesophagus. The Stomach and intestines are found inflamed and sometimes softened. The glands of Peyer are sometimes found altered, but this change is not of common occurance. The Kidneys are generally found inflamed and congested. The Bronchial mucus membrane is not so frequently found inflamed as in Measles. The blood is found in different states, in different cases

Sometimes, and when Death has occurred early, no changes, or such of so slight a degree and discernible as to be totally inadequate to explain the cause of Death.

The prognosis of Scarlatina is doubtful, and the result uncertain. The mildest form of Scarlatina Simplex, after proceeding favourable for a few days, and giving assurance of a happy termination, will suddenly & unexpectedly assume a Malignant Tendency, the powers of life soon fail, and death close the scene. While other cases apparently desperate from the beginning will end in recovery: but as a general rule Scarlatina Simplex ends in recovery and health. With proper care and management Scarlatina Anginosa may be made to terminate in the same manner, but with Scarlatina Maligna the result is more doubtful and the chances are

fearfully against the patient, as many as two thirds the whole number affected by it perish.

The disease is extremely dangerous during pregnancy and the puerperal state, it has been stated that women during pregnancy are not so liable to be attack'd by exanthematous fevers as other persons, but this apparent immunity is more than counterbalanced by the suscept-ability their systems evinces to take upon itself the same unhealthy actions from which they had been preserved while the foetus was in Utero, and should a woman be taken in labour du-ring the prevalence of Scarlatina and be exposed to the contagious influence of such disease, she will at once be attacked by the malady, and in form the most deadly. indeed it has been supposed by some, that the disease might remain dormant in the system, waiting

as it were, only for the accession of labour to break out in fearful severity.

There appears to be in certain persons, an extraordinary predisposition to the most violent forms of Scarlatina, and such persons are generally of the same families. The disease when it occurs in adults, is generally worse than when it attacks children, excepting, however the inflammatory Sore Throat which often attacks the adults of a family when Scarlatina is prevailing.

The character of the prevailing epidemic should not be overlooked in judging of the result of a particular case, a late and scanty appearance of the rash which may then be of a purple or dark colour has been noticed as among the unfavourable signs, as also continued delirium, petechiae, extension

of the pseudo-membranous exudation from the mouth to the larynx, feeble pulse, cold skin, and involuntary discharges.

In simple and uncomplicated cases of scarlatina, no very active treatment is necessary, but it is nevertheless the duty of the practitioner to watch his patient carefully during its whole course, as often symptoms of a severe and dangerous character become suddenly developed

The exhibition of a gentle emetic at the outset of the disease, has received the sanction of many who have written on this disease, and although in many cases this may be unnecessary yet in some it will undoubtedly exercise a beneficial influence. Ipecacuanha from the mildness of its operation will generally be given, or where a stronger emetic is advisable

it may be combined with Antimony. In all cases it will be proper to unload the bowels by a purgative dose of Calomel, which if it does not operate in Six or Eight hours should in turn be followed by Castor Oil, or some Saline Cathartic; afterwards the bowels should be kept open if necessary by cathartics, which should be chosen to suit the circumstances of the case- great care being taken with young children not to purge to exhaustion.

Some gentle diaphoretics should also be prescribed The patient may drink frequently, though moderately of Cold water, or Ice may be held in the mouth and allowed to dissolve. The diet should be confined to such substances as are light and unirritating in character

In severe forms of the disease, when the heat of the surface of the body is great and distressing, Cold or Iced sponging over the whole surface, and

found beneficial; it may be employed in all cases during the early periods of excitement, when the heat of the surface is above the natural standard and at the same time dry, and when no sense of coldness is present.

Bleeding in this disease should be met with much caution and reserve, and only when there exists an obvious indication,- as inflammation of some vital organ. It should be done in full, coagulates firmely. In no instance should it be resorted to when the fever is adynamic, or when there is a feeble pulse, and other signs indicating a malignant tendancy. In doubtful cases, it is better to take it, if at all by leeches applied to the front of the chest; temples, or perhaps still better around the throat, when they may at once act, by relieving the congestion and tumefaction which is to around the great veins, thereby obstructing

the return of blood from the head, giving rise to the accompaning coma. During some epidemics of the disease blood letting is better borne, more beneficial, and may be used with less caution than during others.

When the fever is well developed a course of internal refrigerant treatment should be adopted. Small doses may be given of the neutral mixture, or Solution of the acetate or citrate of Ammonia. When the stomach is irritable the effervescing draught may be used. Nervous symptoms may be counteracted by the addition of Hoffmans anodyne, Sweet spirits of Nitre or Compound Opium.

Calomel has been used freely in this disease, in large doses, its action being generally accelerated by some saline cathartic, and as the abdominal secretions are generally deficient will prove beneficial, not only by restoring or

connecting them, but also by exerting some influence over the capillary system, by which it tends to equalize the circulation, and thereby preventing or subduing morbid action

In the worst form of Scarlet fever, the "Scarlatina Maligna," all the attention which can be bestowed, will too often prove unavailing. The patient sometimes sinking at a very early day with but little affection of either throat or skin, the contagious poison appearing to affect, and act upon the nervous system, which it completely overwhelms; and when the first primary shock of the disease has passed over, the patient often perishes from having his system reinoculated by the poisonous secretions which flow from the ulcerated and gangrenous throat. In this condition the principle and most important indication is to sustain & support the system until

the deadly agency of the poison has in some measure passed by or lost in noxious qualities. And the principle means to insure this end, are by the use of stimulents, Wine, Quina, Ammonia, Oil of Turpentine, Beef Tea &c.

The condition of the Throat should also be relieved. If much Tumefaction, and the strength will permit leeches may be applied there, warm poultices will often prove useful. Gargles will be of unquestionable benefit, they may be made of Chloride of Zinc or of Soda, sometimes solutions containing Muriatic Acid are used with benefit Pow.d Capsicum has also been used both internally, and as a Gargle. When the patient is unable from age or debility to use the gargle, the Solutions may be injected into the Nostrils or against the fauces, by means of a Syringe or an elastic Bottle.

The effects of these applications are sometimes most encouraging. A quantity of slaughy, offensive matter being brought away, and the acrid discharge being rendered comparatively harmless. A strong solution of Nitrate of Silver has been recommended in those cases in which the ulcerated patches threaten to invade the larynx, it may be applied to the diseased parts by means of a piece of Sponge on a large pencil. The internal and external use of Chlorine has been recommended in this variety of the disease. It may be given either in the form of Aqua Chlorine, or in the form of a solution of Chlorate of Potash, in the proportion of 3j to Oxjss and used ad libitum. Nitro-Muriatic Acid, which contains free Chlorine has sometimes been used in its place.

The offensive odour which often arises

from the throat in these cases, may sometimes be corrected by washes of Creasote, Chloride of Soda or of Lime.

When the eruption comes out sparingly, or after having once appeared, then disappears while at the same time threatening symptoms appear, it may be invited towards the surface by the warm bath rendered more stimulating by the addition of salt or mustard; and the employment of active subefacients.

Ventilation and cleanliness should be carefully regarded, they are of much importance in all forms and in all stages of this, and every other contagious disease. The accumulation of any febrile contagion being very detrimental to the patient, it having the power to augment the fever in the first stage, and perhaps to change the constitution

of the fluids in the last.

A very simple manner of treating Scarlatina by way of inunction has attracted some attention. The body is rubbed with lard, or is first anointed with fat bacon, in such a way that the skin may become regularly, but not too quickly saturated with the fat. Some who have tried this practice are sanguine in their regard it as favourable, and speak of it as an improvement in the management of this disease, while others believe it to be attended with little or no benefit.

The Sequelae of this disease often require attention. The patient during convalescence should be sedulously protected against all exposure to cold, damp or fatigue, until the process of desquamation is fairly over.

The disease itself sometimes takes on is of an inflammatory character, and will require for its removal, bleeding, cupping, or leeching, purgatives, and the exhibition of mercury. Benefit is sometimes derived from a combination of Calomel, Nitrate of Potass. and Digitalis. The daily use of the tepid bath, followed by gentle friction of the surface, may prove advantageous.

The mildest and most unstimulating diet only, should be allowed. [illegible] is sometimes succeeded by pains situated behind the ear, and by partial deafness. In this condition, leeches followed by blis=ters, and a proper regulation of the bowels will often prove beneficial. When a discharge from the ear has occurred, the meatus should be frequently syringed with warm water

mucilaginous fluid, or if the discharge be dark coloured and offensive a weak solution of Chloride of Soda or a decoction of Oak bark may be used. Red oxide of Mercury has been used in these cases mixed with Almond Oil.

From the severe and dangerous character of this disease, especially when it occurs, as an epidemic, different prophylactic means have been recomended. The one which has attracted the most attention is that suggested by the founder of Homoeopathy, the administration of Belladonna. He asserted it produced — together with the dryness & heat in the throat — a fleeting redness of the skin analogious to that of Scarlatina, and therefore in accordance with the principles of his system, thought that when administered

so as to produce these effects will prevent the recurrance of the disease.

Numerous observers since his day have tested the efficacy of this medicine, and although in some recorded cases it has appeared to act as a prophylactic, yet in the majority, although the dryness and heat of throat has been produced, the medicine has failed; the subjects afterwards being attacked by the Disease, which sometimes indeed ended in death

The Belladonna if given may be in the form of Solution or Powder — of the former, two grains of the Extract are dissolved in an ounce of water, two drops of which may be given to a child of one year, and an additional drop for every year until twelve drops be given at a dose. Of the Powder,

a half grain should be mixed with some sugar, and divided into ten doses, and one dose administered to a child one year of age, twice a day, increasing the dose gradually until for an adult One grain and a half may be given.

An Inaugural Dissertation

On Wounds.

Submitted to the examination of the Provost, Regents and Faculty of Physic of the University of Maryland,

For the Degree of Doctor of Medicine.

By

D. C. Morgan of Maryland.

Anno Domini 1857.

To

Augustus C. Riggs. M.D.

Of Howard County

Maryland,

This

Essay is

respectfully dedicated

as a brother's tribute

to sound scholarship and

superior skill happily

blended in all that

is attractive

in a man

The word Thesis, from its derivation I take to mean a compilation or placing together of facts, which have been digested in the mind of the writer; hence it is a most appropriate term, for the first essay of a tyro in that most humane of all sciences Medicine. Believing this to be what is desired by our instructors, without indulging in the fascinating discussion of an unsettled question I have selected for my text a subject which is eminently practical.

The term wound is used in surgery in its ordinary acceptation, consequently needs no definition.

They vary in importance from a mere abrasion of the cuticle, to such as immediately result in extinction of the vital powers; they, in truth, are all important, the merest scratch often producing ultimately much suffering and danger and in no instance to be regarded as connected with a part alone. They have been arranged into the following classes, Incised, Contused Lacerated, Punctured, Poisoned and Gunshot wounds.

The incised are such as are inflicted with a sharp cutting instrument. They are the most simple and favorable kind of injury and best adapted, from their regular and smooth cut surface for union by adhesion, and are least liable to inflammation or other accidents. The Contused and Lacerated are so similar in character and in treatment, that they may be considered in connection. Lacerated wounds are occasioned by a blunt body forcibly inflicted or by a moving body becoming attached to a part and tearing it away. These are accompa-

[illegible]d with comparatively little hemorrhage and pain, the latter resulting from depression of the nervous system. the former from the rough edges of the wound, to which the blood is apt to adhere and form a coagulum also from the fact that strained and torn arteries are much less apt to bleed than when cut. They seldom if ever heal by adhesion. Inflammation and its results always occurring. Punctured wounds are occasioned by the penetration into the tissues of a narrow and pointed instrument, which bruises and tears as well as cuts.

There are consequently a compound nature, having the physical characters of the three classes already mentioned, and according as one or the other prevails is the injury serious. A superficial wound involving little more than the integument is of trivial importance; but if the direction be towards the interior there is much ground for alarm. Injury is likely to occur to arteries, veins, and other organs. This is rendered probable by the form of the wound; its nature renders it liable to inflammation, which occurring in deep parts the wound and the pus

which is secreted being confined causes infiltration to take place resulting in much injury to both part and system. Inflammation is also favored in these wounds by the lodgement of extraneous bodies. a piece of clothing may be driven before the instrument, or the point of the latter may be broken off and left in the wound. They are treated upon the same general principles as the other classes, except that dilatation is often necessary when hemorrhage occurs for the purpose of securing the wounded vessel or when any foreign body remains within acting as

counterirritant, for the purpose of removing it, or for facilitating the escape of the confined [illegible] from deep seated inflammation. Gun-shot wounds are inflicted by musket or cannon shot, by splinters on board ships, stones in garrison, pieces of iron from bursting shells &c. They are various according to the character of the penetrating body they are always followed by sloughing & suppuration and always heal by the second intention. The hemorrhage is usually slight unless there be implication of a large artery, it may sometimes be advantageously internally, [illegible]

is no external indications of it. There are very liable to be complicated in their progress by various affections, apt to be followed by deep seated inflammations, necrosis a result of injured bone, hemorrhage on seperation of sloughs, exhaustion by hectic, and by tetanus.
The shock following wounds of this class is always much greater than that from simple fracture or flesh wound, I must confess ignorance of the cause of this, unless it be that on account of the force and rapidity with which the missiles that inflict them are propelled, we are apt to regard them

still more dread, and apprehension, than those against which we can in a slight degree guard ourselves. Formerly, it was thought that a shock capable of causing instant death, might be occasioned by simple concussion; a large shot passing very near to the body yet without touching it. Attention to the course of balls from a gun, has shown that this is not the effects of "wind contusion" but caused by a spent ball which has struck without sufficient force to indict an open wound. Laceration of muscles and aponeurosis, or in fractures of bones is often

occasioned in the same way. The first indication in the treatment of wounds is the removal of fear by encouraging language or if necessary the administration of stimulants. The subsequent treatment must be regulated by the nature of the wound, the previous condition of the patient, and the means of treatment at hand. Certain circumstances are always understood to render amputation necessary or expedient. Thus when a limb has been carried away, leaving a shattered and unsightly stump, which independent of the danger to be in-

curred from gangrene and the subsequent risk from hectic, under a wasting suppuration, would certainly be unserviceable to the patient. When a bone is shattered although not carried away, blood-vessels & muscles bruised to disorganization; when the soft parts are carried away without injury to the bone; when a part is crushed to disorganization without wound of the integument; which occurs from a spent ball and recognized by the loose pulpy feel of the part and its want of sensibility. The opening of joints especially of the lower extrem-

-ties all these demand most imperatively amputation of the injured portions. Having determined to remove the limb, the question then arises, as to the proper time for the operation, whether before the accession of inflammation or after the suppurative stage has been established with a decline of the constitutional inflammatory symptoms. I am in favor of the primary operation, converting the mangled limb into a simple flesh wound, thereby removing the risk of gangrene and its unfortunate results

Poisoned wounds may occur in various ways. The bites of venomous reptiles, the sting of insects, the bite of diseased animals, and wounds occurring during dissection, are all classed under this head,

Notwithstanding the fact, that virus in many cases, seems to influence almost instantaneously the nervous centres, we are compelled to believe that it is diffused through the system, by means of the blood; in support of this doctrine it has been most conclusively proved that poison applied to the surface of the body will not produce general symptoms so long as, it can be

prevented from entering into the circulating fluid. It is supposed by some and appears a beautiful theory that a species of fermentation takes place, upon the entrance of the virus into the system, by which the blood is affected, and as it were, new centres of poison created. This while it will explain the action of poisons that are slow in producing their results, can scarcely, be applied to those cases, in which the deleterious effects are almost, synchronous with the infliction of the injury. We must believe in these instances that the virus acts upon the nerve-centres by

immediate contact with the nerves of the part injured. Snakes are not much disposed to be aggressive to man, yet are always ready to repel any aggression; we can not blame them much for inflicting a wound in defence of that which the human Creator has given to them. I am sure if some gigantic Gulliver, as we must appear to them, were to press his clumsy foot on one, that it would, if possible, cause him for the penalty of his clumsiness, by the loss of his existence. The Rattlesnake and the species commonly called the Copper Head are the only two of

the many varieties of our country whose bite is followed by serious consequences. The virus of the others is so impotent, that but little precaution is necessary to prevent absorption taking place. I have, once or twice been, bitten on the fingers by the common viper and have only treated the injury by the application of a ligature above the wound and by suction. I experienced no more inconvenience than I have from the sting of a hornet. But of the two mentioned, the bite is in many cases deadly. The nerve functions being arrested fatal penetration ensues; or if

reaction take place, a low-fever is induced by the deteriorated condition of the blood, under which the unfortunate victim, harassed by the changes, which take place in the injured parts will speedily succumb. With such dangerous results as these, impending, the treatment must of course be active. The first indication is to prevent absorption. This is accomplished by the application of a ligature to prevent a return of venous blood to the heart. This affords time for the second part of the indication expulsion of the poison. Excision of the part, if it be favorably

situated, if not, incision causing a free current of blood, by which the virus may be washed out. Suction is beneficial in preventing absorption, either by the mouth or by cupping glasses: in the former it is dangerous, if there is any abrasion of the mucous membrane. The use of stimuli constitute the general treatment. Ammonia and Opium stand high, the latter is supposed to possess antidotal properties. Stings of insects are often dangerous from their number, or from a peculiar susceptibility of the person stung. The treatment consists in

removing the sting and the
application of stimulants to
the simple application of
cold, so a most rational
and convenient remedy
when so a terrible disease
arises from the
bite of a rabid dog, that
as yet has withstood its
terrible ravages, the researches of sci-
ence and the skill of art.
I omit its consideration
and pass to the contemplation of wounds received
in the dissecting room.
The virus in these may
exist in two forms, that
which is caused by the
disease previous to death
as that of syphilis or
that resulting from

decay [illegible] of the former is by far the most deleterious yet fortunately is of rare occurrence. Among the many subjects dissected during the past two winters. I have not known of a single instance, in which any inconvenience has resulted. The symptoms are local and general. After the infliction of a wound inflammation takes place, and a pustule is formed, which may degenerate into a painful ulcer. Sometimes erysipelas is established, acute enlargement with abscess of the axillary glands. These of course are followed by considerable general

derangement. Sometimes without any local cause there is disturbance of the general health occasioned by the entrance of the virus into the system, through the lungs or skin, The patient feels languid and feverish, the bowels are apt to become irregular and diarrhœa results, after which the poison being eliminated the system recovers its wonted vigor. in other cases the symptoms are severe in proportion to the local causes and often prove fatal, The treatment is local and general, Prevention of absorption is the first indication; this can be

accomplished by carefully cleans-
ing the part and by suction;
the flow of blood should be
encouraged for the same pur-
pose as in wounds from
venomous serpents. Nitrate
of silver should then be ap-
plied for the double purpose
of decomposing any virus
that may remain and
of forming a crust protec-
tive against any other virus.
Attention to the general health
is the best preventive, cleanliness,
good diet and avoidance of
all dissipation with plenty
of exercise, are sufficient to
enable the constitution to
ward off any evil results.
A discontinuance of the cause is
generally all the treatment necessary

An

Inaugural Dissertation

On

Pneumonia

Submitted For Examination

To the

Provost, Regents and

Faculty of Physic

Of the

University of Maryland

For the

Degree of Doctor of Medicine

By

George M. Zimmerman

Of

Frederick County

Maryland

1857

Gentlemen.

Being aware that the Medical faculty of the University of Maryland require of each Student who presents himself as a candidate for the Honorable degree of Doctor of Medicine a written Thesis or Dissertation upon some subject that will have a tendency to promote the science of Medicine. I have therefore chosen as a subject for consideration Pneumonia. Having had but a small share of practical experience I cannot advance much originality and must consequently confine myself

to a review of what has been
presented by eminent authors
upon the subject.

Pneumonia.

Pneumonia according to the views of Eberle is employed in a general sense to designate any acute inflammation within the cavity of the chest, whether located in the pleura the mucous membrane of the bronchia or the parenchyma of the Lungs. The symptoms of acute inflammation in the chest are: cough, laborious and painful respiration pain in the chest, and fever. A difference occurs, however in the character of these symptoms, as well as in the other usual concomitant phenomena, according as the one

or the other of the three structures just named is the principal seat of the inflammation. Cullen was of opinion, that the pleura can never be inflamed without the inflammation of the pulmonary structure: pleuritis, according to his views, being always accompanied with more or less of peripneumonic inflammation. The observations of Laennec however, have proved that the pleura is often exclusively inflamed, and pleuritic inflammation is generally marked by symptoms sufficiently characteristic to enable us to distinguish it

from acute inflammation of the proper pulmonary substance. Inflammation of the Lungs has been described under many names. Pneumonia is an Inflammation of the substance of the Lungs which is the principle seat of disease. It is often combined with pleurisy and inflammation of the subjacent tissues: but it occasionally exists separate. Pneumonia is one of the most severe and frequent, and, in cold and temperate climates, is calculated by Laennec to be productive of more deaths, than any other acute disease. The symptoms of pneumonia are the following. At first there is

generally a chill, followed by fever; at the same time or soon after, more or less dull pain is experienced in the chest; the breathing is much oppressed; particularly when the patient is in a horizontal posture. The pain is occasionally acute, when a complication with pleurisy may be inferred; the true lung pain is rather dull, and is often referred to the epigastrium or the nipple on either side. Cough is attended with a copious viscid expectoration; the sputa is tough and mixed more or less with blood, or of a brick dust color. It is sometimes white or greenish. The tenacity of the matter expectorated is so great, that we

may reverse the vessel which contains it, and retain it in this position for a time without it detaching from its sides. The cough is at first dry. The sputa is different from the streaked appearance of the sputa in acute bronchitis, though this kind may be seen if the disease is complicated with bronchitis. The skin is hot and dry, the urine high colored and scanty; pulse frequent, full, obstructed, but rarely very hard; in the advanced stage it usually becomes weak, soft and irregular. In violent cases, the countenance presents a livid aspect, headache is a common attendant. The patient lies mostly on the affected side. Physical signs. In congestion

there is slight dulness on percussion,
and diminished respiratory murmur,
soon crepitant rhonchus is perceived.
Occasionally it is not heard except on
deep inspiration. As long as the natural
respiratory murmur predominates over
the crepitation, we should infer that
the inflammation is slight; when the
crepitation prevails so as to mask the
respiratory murmur it is an indication
that the pneumonia has made progress.
In the second stage, or red hepatization.
There are dulness on percussion, bronchial
respiration, and loud resonance of the voice
these signs furnish, within certain limits,
the intensity of the disease. Third stage.—
In this stage the diseased lung becomes

infiltrated with a purulent matter, which is generally consistent at first, but soon acquires the liquidity of common pus. In this stage a peculiar mucocrepitating rhonchus is heard. It is usually announced by the recurrence of the chill, and the expectoration of a peculiar sputum. Pneumonia may be single or double; it may attack but one lung or both at the same time. In the lung affected it may be general or partial, attack the upper or lower lobe, be confined to the base, the root, or the centre. The right lung is said to be more frequently attacked than the left. Authors state that the left lung is oftener affected than both.

causes of pneumonia. The causes of true pneumonia are those of inflammation in general; particularly excessive exertion of the lungs, or cold, applied to the skin, mouth, and stomach. Its most common exciting cause is cold, and alterations of atmospheric temperature. It often supervenes on other diseases; such as measles, small pox, catarrh, hooping cough, and sometimes rheumatism and gout. The disease prevails most in cold weather, or sudden changes from hot to cold. And it generally prevails in the winter and spring seasons. It attacks the robust and plethoric more frequently than the

externally is of a livid or violet hue, heavier, and more dense than natural; with occasional slight effusion, but no consolidation; air penetrates its vesicles; it floats upon water, and crepitates on pressure. When pressed frothy serum exudes. The Second Stage, is characterized by a still greater congestion and effusion into the vesicles and smallest bronchial tubes, and into the areolar tissue; the effused matter is either fibrine or blood. When the lung is cut open it has a granular appearance, and is consolidated; it sinks in water, does not crepitate on pressure, and when

pressed, emits a bloody serum.
The transition of the first into
the second stage is gradual
and partial. The third stage
is that of suppuration, the lung
has the same degree of hardness,
and the granular appearance;
but it is of a pale yellowish
colour. The effused matter is
converted into pus. Portions of the
same lung may be, at the
same time, in the second and
third stages. The occurrence of
pulmonary abscess is not to be
regarded as a very dangerous sign.
In asthenic cases the disease
cannot advance beyond the

first stage before softening occurs. The duration of pneumonia may be laid, upon an average, at ten days.

Treatment of Pneumonia.

From the time of Hippocrates to the present day, pneumonia has been considered as one of the disorders, in which the abstraction of blood is productive of the most unequivocal good effects. The principles of treatment in pneumonia are sufficiently simple: but the extent to which evacuation should be carried, having a due regard to the period of the disease, the nature

of the prevailing epidemic, the age and circumstances of the patient, and the urgency of the symptoms, must be regulated by a habit of discriminations, that can be acquired only by clinical observation. The acquisition of this knowledge, is essential for the safety of the patient.

Treatment. In the first place moderate and subdue inflammation. In order so to do bloodletting is the best remedy. When there is febrile excitement bleeding should not be neglected. In the first stage in good constitutions free bleeding is demanded, and it may be proper to repeat it.

In the commencement of the second stage bleeding may be practiced. It should be followed by an active purge; after which laxatives will be sufficient. Never commence with antimonials; the one sixth or the one eighth of a grain of tartar emetic every two hours. If the skin is hot, use the refrigerant diaphoretics. Nitre may be employed. Expectorants are useful, the best are expatorium, senega, and antimony. Opium is inadmissible during the active stages of pneumonic inflammation. Even in the more advanced periods

of the disease, it must be given with caution, on account of its tendency to check expectoration. A combination of calomel and opium is useful. Dover's powders in combination with calomel, are good to be given at night. Opium and calomel is a very inefficient substitute for blood letting; it is to active a medicine to be employed as a mere auxiliary. Cups may be freely applied with advantage, followed by blisters. Blisters are of great importance in the treatment of pneumonia, but they should not be applied while the pulse

is hard, and the blood
cupped.
The effects of the blister will
not be apparent until the
tone of the system has been
reduced by venesection.
When blisters are objected to; use
a mustard poultice; cloths wrung
out of warm water; and a simple
poultice of bread and milk are
useful, applied over the
part.
If the inflammation terminates
in suppuration, besides the
small bleedings already
recommended when the difficul
ty of breathing becomes urgent,

a decoction will be derived
from the tincture of digitalis.
The strength of the patient must
be supported by a light nutriti
-ous diet, wine is to be avoided.

An
Inaugural Dissertation
on Scammony
Submitted to the Examination
of the
Provost Regents
and
Faculty of Physic
of the
University of Maryland
For the
Degree of
Doctor of Medicine
By
George Washington Haynes
of
Mississippi
A
1857

Gonorrhea in the Male.

Gentlemen

In selecting a subject for my Thesis from the many of much interest in Surgery, I have chosen the above in as much as it is one of the very first diseases to which a young Physician is called after he commences his practice, therefore from its preva-lence becomes of the first importance.

It is a subject upon which much has been written. But as you are aware that my impaired health, from more than one severe attack of illness will now or at this late day of the session preclude the pos-sibility of my giving the investigation it would otherwise be my pleasure to do. Brief as it must of necessity be as well as imperfect as I am sure

it will be, I trust, however under the circumstances it may meet with your favorable consideration.

This disease has been defined as "specific contagious inflammation of the urethra, attended from its early stage, with a profuse secretion of much mucus, intermingled with a little pus."

During my time in this City, one year of which, I have served in the Baltimore Infirmary, I have had numerous opportunities of seeing the disease. From what I have heard and observed relating to the disease my conclusions, as to its symptoms, diagnosis and manner of treatment have been as follows.

Firstly, as to the symptoms.

the entering the disease. From four to fifteen days after a person is exposed to the inflammation, he begins to have a sensation of itching about his organs of generation, especially at the glans penis, and in some cases a soreness along the whole length of the urethra. Soon after this itching sensation there follows a mucous discharge intermingled with some pus, accompanied generally with some degree of pungency. The discharge in a short time becomes much more profuse, more opaque but not so tenacious. The parts now present more decidedly the appearance of inflammation. The lips of the external opening

of the urethra being exposited they present a new appearance. At this stage of the disease we have a much smaller stream of urine from the urethra, due to the swollen condition of the lining membrane of the urethra. Now as a general thing there is increased pain in urinating should there be a high degree of inflamation. the penis in its attempt to become erect fines it has offered not be straight but bow shaped condition, This is due to the urethra failing to become elongated in proportion to the other parts of the penis, caused by the adhesions of the cells from inflamation in the Corpus Spongiosum

which the corpus cavernosum is left free from such a cause, to prevent its too elongations

During this bow shaped condition of the penis, it is not unusual to have a hemorrhage from the urethra, being the result of extension of the parts, therefrom rupture, and following the rupture of some of the small blood vessels

The hemorrhage is generally productive of good, not unfrequently there is a degree of swelling about prepuce, which makes it an impossibility to draw it over the glans penis, also the perverse that is, the prepuce gets behind the glans and cannot be brought forward. Occasionally there may be felt projecting from

the under part of the urethra
a hard tube shaped body from
an inch to an inch and a half
in length, which usually sup=
=purate causing at times a great
deal of pain. Often other parts
sympathise with affected
parts. The bladder may become
so irritable as to cause very
frequent desire to relieve itself
of small quantities of urine.
Glans of the penis and frequent
pain in the back accompanies
frequently, with fever and
thirst, however it is as a general
thing only in the most inflamed
gonorrhoea that we have the
parts taking on sympathy
to any great extent. Secondly
Having noticed the most promi=

-nent symptoms that characterize this disease. I have now to proceed to the diagnosis of the disease. It is a matter of no small importance to be able to assure some persons, especially married ones, that it is a well established fact that a discharge in every respect like unto gonorrhœa both in the appearance of the discharge and its effects upon the parts may be produced from connection with a woman who is perfectly chaste. Besides those there are many irritating that applied would come a similar discharge and affect the immediate and neighbouring parts. But how to distinguish the simple or non-venereal

from the true venereal discharge as yet is not known since no simple requires the same treatment and partakes of the same symptoms and nature of the true venereal disease we must be satisfied with an answer in the negative. Should the question be asked also as to whether there is any difference in the two kinds of discharge.

Thirdly and lastly I shall notice some of the modes of treatment which are highly recommended in this disease. But before mentioning any internal remedies or local applications

we will notice briefly the condition of the patients constitution as to his previous habits. As in all other diseases as a general rule, so in the particular disease, much depends upon the former habit. If a patient has been regular in his habits and has taken the precautions to procure timely and necessary assistance in the course of a few days or at furthest a few weeks, he will find himself free from the disease. Whereas on the contrary if he has been a man of irregular indulging in high seasoned food, intemperance and sensualities, and furthermore has

neglected to apply for timely and proper assistance the disease may continue for weeks months or years. Having arrived at a gleet form after continuing for a length of time it is apt to leave a bad condition of the urethra causing stricture & made known by the difficult discharge of urine. Then it is we see the different results of gonorrhoea in different persons. Proper habits with timely and judicious treat=ment there is not much to be feared from the disease. Injudicious habits and negli=gence in using remedies we may expect consequences of the

most serious and dangerous character. We come next to the Treatment of gonorrhoea it is divided into three stages if the Physician apply to the Physician before the inflammatory stage makes it appearance, we may in almost all cases check the disease in the beginning with Ricord's plan of treatment; viz inject the urethra once every four hours until the discharge is mingled with blood with the following recipe

℞ Argentum Nitrosqr iij
Aqua ℥viij

Then let it be followed with a weak solution of Zinc, sulphur or alum. This treatment may

be continued until discharge ceases. The patient should have a mild purgative and a dose containing

℞. Bal Copaiva gtt. xx
Tinc Cubebs. gtt. xxv

three times a day. Much exercise should be avoided, abstinence from all stimulating drinks. This regimen as in regards to both diet and drink should be continued for a week or ten days. Keep the penis wet with tepid or cold water.

If this disease has gone on unchecked until it reaches the inflamatory stage, the patient should stay quiet as much as possible. Apply leeches to the peritoneum

As to number we must be governed by the general symptoms. The penis and scrotum ought to be kept suspended with a bandage, and kept wet with cold or tepid water. The glans penis often requires to be protected on account of being irritable. The diet should be low, and abstain from liquors. The patient might drink mucilaginous drinks such as barley water, & the scalding condition of the urethra may be relieved by combining an alkaline with a sedative. Hip baths of tepid or warm water should be avoided on account of exciting erections and Chordee. The bowels should be opened.

with Calomel at night, and followed by some Cathartic in the morning. Druitt advises Calomel to be given in the following form ℞. Calomel gr. j
Tart. Antimony gr. ¼
to be given at night when there is much pain and chordee.
The mercury is not given in this case as a specific, but as an antiphlogistic agent.
When the patient is freed from fever, take the following

℞. Bal. Copaiva . ℥ß
Tinc. Cubebs . ʒj
Sp. Sweet Nitre . ℥j
Sp. Comp. Lavender . ℥v
Aqua . . ℥viii

take ℥ß of this mixture three times a day. The Capsule is a

very good form to take it, in this as it prevents excoriation

When the patient is plethoric and suffers much from pain and fever and has a hard bounding, furred white tongue pain in the abdomen and other general symptoms of inflamation about the urinary organs, it would be proper to take blood from the arm.

In the acute stage when there is any tenderness of the glands in the groin over the testicle, injections should not be used as they might easily produce swelling of the testis, and soreness around the neck of the bladder.

The painful erections and

Chordee that often occurs in the stage of the disease may be relieved by bathing the parts in tepid or cold water. Small doses Dovall doses of Camphor and henbane at bed time if Chordee is obstinate, the parts may be smeared with mercurial ointment and belladonna.

Hemorrhage may be checked by applying cold applications to the parts. The inflamed glands are treated with leeches.

Gleet is a very common symptom accompanying gonorrhea. The treatment is the same as that in the first stage of the disease, injections of various kinds.

An
Inaugural Dissertation
on Gunshot Wounds
Submitted to the Examination
of the
Provost Wardens
and
Faculty of Physic
of the
University of Maryland
For the
Degree of
Doctor of Medicine
By
James Carter Fuller
of
Maryland
On
1857

Gun-Shot Wounds.

Under the term Gun Shot ~~wounds~~ wounds, may be included, injuries of any kind, caused either by the discharge, or bursting of fire-arms; or by violence brought to bear, on the human body, in any way by them.

These injuries may partake of the nature of lacerated or contused wounds; and may exist with or without solution of continuity. And on account of the numerous forms, in which these wounds may present themselves; I begin with the most common - viz, wounds by balls or bullets. When a musket or pistol ball, has penetrated a common fleshy part, a hole is seen, which appears somewhat smaller than the ball itself; with its edges lived an inverted, and if it was poked completely through the part, which it entered, there will

be another larger opening, with it's edges everted. And such wounds, when they occur in fleshy portions of the body, and do not interfere with the bones or large vessels, may be considered simple, as well as common. Another and more common form, are those in which the balls have penetrated merely through the skin or superficial muscles.

A very remarkable circumstance in connection with gun-shot wounds, is the facility with which a ball may be turned in its course, by the most minute obstacle:— Any convexity or enequity of surface, or thickness of parts with which it comes in contact, may cause it to take a circuitous route. Thus, a ball may enter the side of the head, neck, chest, or abdomen, can pass out through the corresponding part on the opposite side, appear-

ing to have passed immediately through the intervening space, whereas, it has merely passed around under the skin.- Under similar circumstances it has been found in the very orifice which it entered. Balls may run along crooked surfaces, - thus, when the arm is extended, a ball has been known to enter near the wrist joint, traverse the whole arm and make its exit at the shoulder.

I had the opportunity of seeing a case of this discription during the winter, - which presented itself, thus; - a man while walking along the street, - a pistol fell from his pocket; - the Hammer striking the bricks caused an explosion, - the ball entering near the ankle joint, and encountering the bone, was diverted from its oblique course. - It then took an upward and straight direc-

tion,— traversed the whole lengths of the leg and thigh and came out above the crest of the ilium.

The course of balls producing such injuries, may often be discovered by the blue or dusky-red line, or by the upraising of the skin; especially if the wound be superficial.

Another form in which gun-shot wounds present themselves, are those caused by spent balls: these are account of their extreme complication, violence of the injury, and so little external appearance of it; are generally quite difficult to diagnose.

In a majority of instances, it is discovered, that although the skin remains unbroken, or but slightly grazed, yet the parts beneath have been almost entirely disorganized:— the muscles completely mashed,— the bones, shattered, and the vessels rup-

lined or torn asunder.

Parts which have received such injuries are necessarily motionless, and senseless, and benumbed for some distance:- swelling more from extravasation than inflammation is soon set up;- Gangrene follows speedily, and is extended to the neighbouring parts, now debilitated by participation in the injury, and by their connection with dead tissues.

Formerly such injuries were called wind contusions, being as they were supposed; caused by the air, driven with great velocity by the ball, against the body: but from our knowledge that wind can produce no such injury, and from observations after death, we are enabled to pronounce the statement erroneous.

Wounds from small shot produce different effects, according to the dis-

tance they traverse, before entering an object. If the distance be great they are generally scattering. And it is remarkable, how a load of shot of the same sizes, and discharged from the same barrel of a gun, may vary in direction, before they have reached a given distance. Thus a person may be within one hundred yards of an assailant, when fired at, and while some of the shot, take effect in the head, others may be found in the lower extremities. But on the other hand when the distance is short, they generally strike in a mass, and are productive of more injury than a single bullet; for they spread in the flesh, and thus produce great laceration, besides the great pain and mischief arising from their lodgment in the tissues. The treatment of injuries by shot from a distance, is

very simple, the extraction of the shot being nearly all that is necessary, which is very easily accomplished with a sharp-pointed instrument of any kind; but when they are more deeply buried, it is not advisable either to probe or dilate the wound, as such small substances are not generally productive of disastrous consequence.

I have known instances in which small shot have remained in the body for years.

Gun-shot wounds may be complicated with other foreign bodies besides balls; such as pieces of clothing, buttons, coins, watches, or their appendages, and all the different contents of a mans pocket, — Splinters of wood, stones, earth &c.

Another class of foreign substances, and those considered more dangerous and troublesome; are splinters of

bone of all sizes, escapula, ploughs, &c.
Masses of extraordinary, ~~sizes~~ and almost incredible sizes are sometimes found in different portions of the body: and it is strange how such enormous masses can be contained in a limb or among the muscles, without being perceptible. The explanation is not however very difficult. The immense rapidity with which they are propelled, not only forces them into the soft parts, but compacts these parts closely together, while the space they formerly occupied is filled by the projected body.

The elasticity of the parts also permits substances of very large size to pass in, without the external entrance in any way corresponding with the size of the body which entered.

Lodgement of balls.

It is always very expedient to ascertain whether the contents of the apparatus, which has caused an injury, has passed out, or still remains in the body; and this is very difficult, on account of the irregularity of course which they generally pursue after entering: and again there may exist two holes made by the same ball; and from the great distance between its entrance and exit, we may be led to suppose that two balls have entered the part:- Some light however may be thrown upon the question, by ascertaining the positions of the patient and his assailant, when the injury was received.

Again, it may ~~have~~ come in contact with some dense part,- such as cartilage, bone &c; by the elasticity of

which, it may be driven back through the original opening:— thus a ball has been known to drive a piece of bone into the brain and drop out afterwards. Two balls may enter by the same opening; one of which may pass out, the other take a different course and wound some important part. A ball may also split, one half pass out, and the other remain in the part:— The orifice made by the former half, inducing us to believe that no foreign substance remains.

In such cases therefore, we should be very guarded in our prognosis, and not much governed by the external appearance of the injury, but rather by the constitutional disturbance.

Of the extraction of foreign bodies.

Owing to the vulgar notion, that recovery from an injury is impossible without the extraction of the substance, that caused it; many surgeons have, — and without just grounds, — endeavoured to accomplish their extraction from any portion of the body, without any reference whatever to its importance or vitality. I am sure that when a ball has penetrated deeply into the head, chest, or abdomen; endeavouring to discover its location, or to extract it, can only be productive of more injury.

It is only then, when the ball is superficially lodged in any of the above mentioned portions of the body, in the fleshy parts, or in the extremities; that we should attempt extraction. And in these instances, the exact position and relations to important organs should be thoroughly understood.

As regards the means of extracting such substances; several instruments have been invented, such as bullet extractors &c, but an account of the uncertain and circuitous course which bullets are usually driven; they are of little or no importance in extracting. The common forceps are now more used. Dilatation of the wound is often also necessary. But the great point, as I before stated is the situation of the extraneous matter; and one must possess very little manual dexterity, indeed, who cannot remove it, when removal is necessary.

Of Haemorage. When a person is shot, the first thing of importance to be considered is the flow of blood from the wounded part.

On this point authors differ widely.

The limbs tremble, the patient cannot stand unsupported, and suffers from nausea, vomiting, faintness, and singular alarm, and anxiety and confusion of ideas.

The severity of these symptoms will nearly always indicate the extent of injury and the importance of the parts injured. This will depend somewhat however upon the habitual bravery of the patient.

After the wound has been received, inflammation generally comes on from twelve to twenty-four hours. The wound becomes swollen, stiff, and painful, and discharges a little reddish serum. Pus begins to be formed on the third or fourth day; but the suppuration is limited according to the effusion of lymph around the wound:- about

the sixth day, the parts which have been killed by the foreign substance, begin to separate and change from a blackish-red to a brownish-yellow color, and sooner or later than the tenth or fifteenth day, according to the vigor of the constitution, the slough is thrown off. Granulations now begin to form, the wound contracts, and generally heals with a depressed cicatrix in about six weeks or two months. Such is the termination of simple cases, when they occur in vigorous constitutions, and have received proper treatment:— but when in persons of debilitated constitutions &c, the prospect of recovery is generally very slow and doubtful.

Gunshot wounds affecting the contents of cranium, chest, or

abdomen, generally terminate fatally and in a short time, although there are many exceptions to the latter statement. — We have at present in the Infirmary, two men, both of whom received a ball in the ~~chest~~ lung, and although they have recovered from their immediate injuries, are now pronounced phthysical.

Treatment. The general indications are to overcome the shock of the nervous system, extract, if advisable, the foreign matters, adjust the injured parts, and place them in a comfortable position.

A wound made by a ball passing through a fleshy part, should first be sponged clean, and dressed with dry lint, and secured with strips of adhesive plaster. Stimulants, such as wine, Ammonia, or a few drops of

the tincture of opium, may be given if the patient is weak or suffers from faintness. When inflammation is set up, and followed by suppuration; the primary dressings are to be removed, and poultices, tepid water, or other soothing applications substituted. Care must be taken that the sloughs are readily thrown off, and no sinuses are formed.

The internal treatment should be moderately antiphlogistic; consisting of purging, low diet; and bloodletting local, and sometimes general may often be employed with advantage. An opiate at bed-time will generally allay pain, and promote sleep. Wounds of more serious character are to be treated on the above plan, it being more or less active, according to the symptoms.

Amputation is said to be more frequently necessary in gunshot wounds, than in injuries produced by other kinds of violence, and is justifyable under the following circumstances:—

If a limb is completely shattered or perforated by several balls, and the joint endangered, it should be taken off above the articulation with the other bone. When the femur is fractured, and the femoral artery or vein, or the sciatic nerve are broken or lacerated. When large joints have suffered injury. When the main artery in any limb is wounded, and haemorage cannot be checked in the ordinary way. And when gangrene has commenced, and there is no possibility of its being arrested.

An

Inaugural Dissertation,

On

Puerperal Fever.

Submitted for Examination;

To the

Provost, Regents and Faculty of Physic;

Of the

University of Maryland,

For the degree.

of

Doctor of Medicine.

by.

Joseph M. Hammond.

of

Delaware.

Puerperal Fever.

Gentlemen.

I have you perceive selected a wide field to bring forth my views, and in doing so, I feel like the clown, who after taking up the violin, violently threw it down exclaiming that there was music in it, but he could not bring it out.

Puerperal fever! my heart shrinks at that name, for with me it is a word of fear, but alas, what is the name compared with the disease which even Small-pox, which reduces the fairest form of humanity to a mass of breathing corruption cannot be looked upon with greater awe. Since, like an inexorable Atropos, it cuts off the thread of life, for those to whom Clotho and Lachesis weaved give the longest

span. — There is something so touching in the death of a woman who has recently given birth to her child; something so unconquerable in the disappointment of cherished hopes; something so pitiful in the deserted condition of the newborn helpless creature. Forever deprived of those tender cares and caresses so necessary for it — that the hardest heart is sensible to the shock.

Puerperal fever (over "a child" and fever "to bring forth." This my grave disorder is familiarly known to all medical men by the names of childbed fever, peritoneal fever, puerperal peritonitis, metritis, metroperitonitis, uterine phelitis, and lastly, pyogenic fevers.

There is in fact no disease on the whole Catalogue of diseases, about which there exists a greater discrepancy of medical opinion, or which are involved in more perplexing speculation than those of the puerperal class. Strictly speaking there is no such thing as a puerperal fever; for what is called puerperal is repeat will be found, by an appeal to nature, not to be a disease sui generis. And some medical writers object to that term, on the ground that it indicates nothing more than a common peculiar fever. which all pregnant women are liable to. Mr. Strathen was the first to suggest the name puerperal. as being more comprehensible and more easily recognised. and since this—

time, it has been known to all medical men by that name.

This disease is supposed by some, to be a fever dependant on an inflammation of the Serous coat of the abdomen, or some portion of it—an inflammation of the ovaries—one or both of them; of the womb, with, or without coincident inflammation of the peritoneum; of the veins of the womb; or the absorbent vessels of that organ.

It is probable, that a major part of the cases consist of Serous inflammation only,—cases in which the Sub-Serous textures have little participation in the pathological modifications of the peritoneum proper.

This fearful malady has prevailed—

as an epidemic on the continent of Europe springing up as a vast upas, overshadowing with its arms of death, the whole area of a city or a country. We find it on the records, that Rachel, the wife of the patriarch Jacob, died of childbed fever after she gave birth to Benjamin, and the wife of Phinehas after she travailed with Ichabod, which are cases of high antiquity. So it is easy to be seen, that ancients were not ignorant of this disease. Again Hippocrates, and Avicenna describe it, Plater in 1602 — makes it to consist in inflammation of the uterus, Tennert in 1656 recommends bloodletting. Riverius 1674 attributes it to suppression of the lochia, and Sylvius in 1674 to deficiency of the lochia. Willis takes the

same views of the disease as Plater. Reynold. Peechy. and Strathen. were the first to adapt the name Puerperal fever.

This disease prevailed epidemically in Paris in 1646. in Vienna in 1795. and in Edinburg in 1773 from which not a single case recovered. Its first appearance in this country was noticed by Mr. Jackson. in Northumberland in the fall of 1817. and at Sunbury in the Spring of 1818. It has visited the Pensylvania Hospital, of Philadelphia several times. and almost every case terminated fatally. Mr. Stewardson states that 'a puerperal epidemic appeared within the walls of that institution in 1830. while he was resident physician. and the mortality was so great. that many of the patients were

removed to a portion of the house used as a picture gallery, but the disease soon followed and with equal intensity and severity, cutting down with it arms of death the trees that had just put forth its fruit, and the buds of immortal amaranth and beauty were left drooping.

Mr. Harris remarks, that the disease never visited the old Alms House, which was located only two squares farther west of the Hospital, and which abounded with filth and a "rank compound of villanious smells.

Look at the statistics of puerperal epidemics reported by Leah, Hunter, Clark, Gordon, Campbell, Armstrong, Lee, Collins Ferguson, and you will find that nearly

one half of the cases terminated fatally.

It is an epidemic, puerperal fever prevails more among the lower than the higher classes; but in its sporadic attacks, it seems to have no respect for place or person. It is more prevalent, too, and certainly more virulent in hospital than in private practice. It has no predilection, however, for one constitution more than another. It occurs alike in the xanthous and anemic; in the robust and the rebel; in the young and the middle aged; in the married and the single; after the first and subsequent confinements; after rapid and easy or protracted and dificult labours; and according to Dr. Blundin, "in those surrounded by every comfort, and receiving every—

attention their situation demanded; as in the poor and the destitute.

An interesting question may be asked: "Is puerperal fever contagious. This question is one which requires much thought. and as there is much diversity of opinion on this point. I cannot use too much discretion in writing on this topic Mr. Gordon." holds puerperal fever as being contagious, and remarks that every person who has been with a patient with puerperal fever. becomes imbued with an atmosphere of infection. which is communicable to every pregnant woman within its sphere. Mr. Hall Meigs. says that he has gone from the dissection of bodies having died with symptoms of the most violent fever. and

has never yet given to those whom he Doc-
-tor afterwards attended in their labours. There-
fore, this gentleman remains incredulous as to
the contagiousness of the malady, and repud-
-iates the testimony of others.

Mr. Rutter informs us of a case he was
summoned to attend after he had been
absent from home some ten, or twelve days,
previous to visiting the patient. He entered
a warm bath, had his head shaved, put
on a new wig, boots, hat and every article of
his dress was bought new for the occasion.
and taking care not to touch a single
article of the clothing he had previously
worn. The patient whom he attended w-
-as immediately seized with symptoms of
puerperal fever, which resulted in her death

eleven days after the birth of the child. The same precautionary means were again and again resorted to, but with no better success.

In the Prize work, by Baudelocque. He speaks of the difficulty of discriminating the epidemic from the contagious character of a disease. and thinks that in the present state of our knowledge, it is impossible to decide as to the contagiousness of our malady. But notwithstanding the sentiments of Mrs. Gas and John Clark. He inclines to the opinion of the non-contagionist.

Mr. Blackmore, of Edinburgh, contends that it is contagious in both of its forms. Sthenic and Putrid, and says that the asthenic, is more malignant than the sthenic

Mr. Hodge, of Philadelphia. What will be

day contagion or non-contagion. he will be constrained to respond in the affirmative. for in the year 1850. he was called a watching pestilence. and says that the disease was not propagated by atmospheric influence. but by personal communication. nearly every case which he attended. was seized with symptoms of puerperal fever. which terminated fatally. his mind became much troubled and he resolved to spend a few weeks in the country which he did. and underwent a thorough purification; on his return to the city. he was summoned to take charge of a case of labour. and after repeated and appropriate immersion of his person in water. than putting on a new suit of clothes. he waited of the lady. who(S was.

well acquainted with, and delivered her
safely. On the morning he called again,
but to his great mortification. he found
that on the previous night, the seeds of death
had been planted in her system, and ma-
turation was fast approaching. He saw
disease with its loathsome smile, sever the
golden chains which bound her to those
she loved:- in five days. She bid adieu to
earth and her spirit soared its way to
heaven her home.

O mors! ubi tum stimeus tuus?
O sepulcrum! ubi victoria tua?

Forty out of fifty three cases, in the Sun-
derland epidemic occured in the prac-
tice of one Physician and his assistant. I
cannot but believe that these cases of pu

-erperal fever occurring in succession to the same practitioner, are something more than ordinary contagion operating through the medium of a tainted atmosphere: I believe them to be instances of direct inoculation, that the hand of the accoucheur is brought almost out of necessity into frequent contact with the uterine fluids of the newly-made mother. We have examined the interior of the dead body, and remember with what tenacity the smell, which is thus contracted, clings to the fingers in spite of repeated washings:- and whilst the smell remains, there must also remain the matter which produces it. And when we remember how minute a quantity of animal poison may be sufficient to corrupt the whole mass

of blood, and fill the body with loathso-
me and fatal disease:- remember the raw
and abraded State of the parts concerned in
parturition; the interior of the uterus forming
a large wound and presenting as Dr. Furgur-
son remarks, an exact analogue to the Surf-
ace of a newly-made Stump:- The more
external Soft parts bruised and Soar, an-
d remembering all of the facts. that the
disease does not effect others than lyin-
-ng-in women! Recollecting all these facts.
you will see too much likelihood in the
dreadful Suspicion. that the hand of
the accoucheur which is relied upon for
Succour in the painful and perilous ho-
-ur of child-birth, and which is intended
to Secure the Safty of both mother child

may literally become the innocent cause of her distinction.

I think it hardly possible to prove that the disease is not infectious, and we have well authenticated instances on record. but we want facts and not assumptions to prove this important point. In this case I think that we should all be capable of forming our own judgement. for by so doing we throw off the burden of errors, of fashion, of ignorance, of dark ages. we breathe the pure air and walk in the candle light of Science.

What are the Predisposing Causes of fever, in the puerperal state. The most remarkable one is a plethoric condition of the system. There is in all pregnant women

a large increase of blood, and an alteration of its quality, and when drawn and allowed to stand some time, we will find the cupped shape appearance of the clot, presenting the buffy coat, which indicates an inflammatory tendency:- its sizy consistence, which proves an excessive predominance of the fibrinous element. Then we remember that gestation is carried on at the expense of an exalted vital vital force.- and that the few last weeks of pregnancy are attended with feverishness, and general irritability of both body and mind, and the nervous system too in many cases of difficult and protracted labours, become exhausted, which greatly adds to any inflammatory action once begun, and may be prevented from extending

far and wide beyond its radiating point.

A pregnant woman is a perfect sensitive plant, alive to the slightest touch, and any slight circumstance, whether stimulant or an irritant, and which in a healthy constitution would probably produce no sensible effect, now makes a most powerful impression, and increases the action of the heart remarkably. Delicate female who during their ultra gestation confine themselves to the house, and never take any exercise in the pure air, and sit patiently waiting the hour for lying-in, are rendered extremely prone to inflammatory fever after delivery.

As to the serous lining of the abdomen, there is scarcely any portion of it

that is not specified in pregnancy. The vast extension of the peritoneal surfaces of womb and the abdominal integuments, and then the non-gravid uterus, which is not larger than my thumb, comes in gestation to be three inches high and nine in width. Its invisible vessels and nerves, come to be great cords and tubes, and its microscopic muscles and ligaments, acquire a force to rend itself into pieces, into its rage to oppose a full-grown.

The peculiar condition of the abdomen should be taken into consideration before delivery. The uterus, uncommonly enlarged presses on the abdominal integuments, disturbing their function, distending the peritoneum, creating even then, a tendency to disease in the

-ose parts, especially if the bowels be neglected. If the colon becomes overloaded, the delivery is apt to be far more painful than otherwi-se, and the bladder sometimes becomes dis-tended. The accumulation of feces and urine frequently acts as an irritant, and induces fever! Therefore it is highly important to pay the strictest attention to these parts.

Again we must not think that the lab-our is the end of the scene, for the womb and vagina, with there whole cortage of arteries, veins capillaries, nerves and absorbents, as well as the muscles and celular tilla, are passing during forty days afterwards, back again into the non-gravid state! A transitions period, full of hazard, and open to the attack of inflammation.

upon the interior surface of the uterus is left the cotyledonous superficies, with the patulous orifices of the bechial vessels, that were uncovered by the detachment of the placenta, the mouths of these vessels are bathed with a fluid of the most putrid and offensive kind, producing inflammatory exhalation of the capillary and nervous systems! The new circulation in the breasts must begin; and the given tension of the mammary glands and galactophorous tubes develope fever, which is one of the essential characteristics of inflammation.

What are the remote causes of fever in the puerperal state. Depressing agents exert a high influence, and are am-

-ang the most common causes. There are but few women who go through with their labours without violent perspiration which flows in copious streams! Such a condition of the cutaneous exhalents leave the delicate vascular and nervous apparatus in a highly susceptible state, so that cold and damp operate with peculiar intensity in causing disease. Any mental excitement will sometimes produce this unpleasant stage and its consequences! Indigestible food taken a few hours after delivery will frequently excite alarming symptoms.

Again; Stimulants either mental or dietetic may induce fever after delivery, and repose is considered one of the best preventatives.

-Reprehensible Stimulants, such as brandy or wines should be strictly prohibited: Local irritants:- among them are the too frequent examination of the vagina and wombe, the too hasty removal of the placenta, before the muscular contraction of the uterus has become fully established:- these operate with with much severity on the whole nervous system-promoting fever, in consequence of the local irritation.

The peculiar condition of the atmosphere, sometimes acts as a predisposing and sometimes as a remote cause. We find it stated that in London, people living along the borders of streams surrounded by a low marshy district, and where the air is tainted with miasmatic effluvia

are very liable to this disease. So I would infer from the observation of others. That such persons are at any time liable to become a victim of the terrible malady: "For says Mr. Hulme, the pestilence is like a fierce untamed enemy, spreads his hostile banners in open day, and feasts on carnage and destruction, till glutted with slaughter, he himself sinks down and dies! But the puerperal fever, like a secret revengeful foe stabs in the dark to the very vitals; and though he kills only one at a time, yet he is privately slaying every day, and never satiated! thus making up in length of time what others does by sudden devastation.

Five persons removed from such an

atmosphere propagate such a disease. it is just possible.

I shall now take up the Pathology. Puerperal fever is supposed by some medical writers to be either inflammatory or congestive. The inflammatory form is more mild and curable especially when it extends to the veins and lymphatics! The congestive more malignant and often beyond the reach of the best directed remedial agents.

The inflammatory form of the disease may have its origin in an inflammation of the muscular and mucous coat of the uterus. Constituting a puerperal peritonitis or hysteritis! or it may commence in an inflammation of the peritoneal coat which forms an envelope in

for the uterus and its appendages, and sometimes the other pelvic viscera, and forms in this case strictly speaking, a puerperal peritonitis. On a phlegmonous condition of the veins of the uterus, which is followed by a secretion of pus, that circulates through the vascular system: this variety is termed pyogenic fever. For Mr. Tonelle, found pus in the veins of 97 cases and in some it was clearly demonstratable in the thoracic duct.

The disease may have its origin in an inflammation of the uterine lymphatics, this was observed by Boivin, Huges, Duplay and others, M. Tonelle in his interesting work on puerperal fever, speaks of the epidemic which occurred in

La Maternité, in 1829, states that out of 222 cases, in which microscopic examinations were made, "suppuration of the lymph-atics occurred in 44 times.

It may be caused by "congested venous blood in the pelvic and abdominal viscera, or in the brain, or in both, constituting the congestive or typhoid form of the disease:- Again it may be due to a sudden shock given to the nervous system, by which all the dynamic forces is brought into play: in this we have a puerperal adynamia.

Puerperal fever is supposed by some to be erythematic or erysipelatous in its character:- I cannot see any resemblance between the two diseases, for erysipelas is situated in the skin and appendages, while on

the other hand, the microscopic examinations concur to shew, that puerperal fever, is a febrile disease developed in the system from certain points of local inflammation of the reproductive organs. Yet it is true that erysipelas is sometimes found to descend into the tissues lying beneath the skin converting itself into oedamatous erysipelas, and perpetuating there the most direful mischief in the cellular and adipose structures. Erysipelas is essentially a dermal disease and can only effect the dermal structure. It is hardly possible to state that a woman has an erysipelatous inflammation of the serous lining of her abdomen. She may have an erysipelatous inflammation of the vagina

and the living membrane of the womb — if she has one — a question still subjudice, because a mucous texture is nothing more or less than a true skin turned inwards.

There is not, and cannot be any identity between erysipelas, a dermal disease, and the deadly inflammation of the peritoneum, observed in lying-in women, though when erysipelas prevails as an epidemic in Hospitals — women confined in such places are just as liable to take it, as any one else, for their wounds are extensive, and are open to any morbific cause.

Again! we find that the two diseases has prevailed epidemically, and Mr. Blackmore of Edinburg, attempts to prove the identity of the two diseases, for says he-

the poison of erysipelas was the origin of puerperal epidemic. I think this, an absurd idea. and without foundation. Peautman, gave it as his opinion that "puerperal fever is of the nature of erysipelas:" and the celebrated Gordon says that the diseases are connected, that there is an analogy between them, and that they are concomitant epidemics." Sir John Clark. says, that the two diseases prevailed simultaneously, in 1787. and 1788. this is what I cannot perceive. though it would be unjustly for me to refute the testimony of learned men. but I am at liberty to entertain my own opinion, which I have very briefly expressed, and remain incredulous as to the identity of the two diseases.

There is three reason why a woman Shou-
-ld have an inflammatory fever in the
puerperal State.

First. the increased sensibility of the
body. and also the irritability. which render-
-s the excitement excessively high when fev-
-er does occur.

Second. the plethoric condition which
exists in the System, would be more ge-
-neral were it not for the lochial and
milk discharge, and when this has b-
-een saving. fever is apt to arrise.

Third. The condition of the pelvic and
abdominal viscera;. which are very tend-
-er. "The observation of Celsus, is very par-
-ticle and just:. that a women after d-
-elivey should be treated exactly as if

She had undergone an operation.

Intercurrents occasionally give rise to fever in child-bed: for instance a lingering state of the liver, if there be any impediment to the circulation through the liver. The mesenteric vessels become unusually gorged, and the intestines are then rendered very prone to inflammatory action.

Symptoms. The epidemic puerperal fever usually commences within 48 hours after the accouchement; and in hospital patients earlier than those in private practice. In this rule there are some exceptions. Dr. Collins "speaks of Cases in which the disease did not make its appearance until various periods, thus 32 were attached on the first day; 29 on the suc-

and; 8 on the third; 2 on the fourth; and one on the eighth. M. Malouin. has given the history of an epidemic, which occured in the Hôtel Dieu, and states that the disease usually commenced with Morrhoea, the uterus became hard, dry, and painful and sometime swollen:- the lochial discharge had not there ordinary course. and the secretion of milk was altogether stopped.

But I. shall proceed to the general symptoms. as they are presented to our view.

The fever generally commences in the first five days after the birth of the child. or it may commence earlier. according to some. and then more severe will be its-

character. and more often the inflammation, a slight rigor, or shivering fit, succeeded by a hot fever, terminating in profuse perspiration, with a rapid pulse, severe pain in the hypogastric region, and great tenderness upon pressure, are the prominent pathognomonic symptoms of most cases of puerperal fever.

There is two stages. the first, is when the pulse became quick. and the skin hot with inflammation. the pulse at the wrist will be found full and expanded, or small. hard and expanded or contracted, like cords. the patient has palpitation with pain or pressure over the bowels! if the inflammation be very acute in this stage, it may run its course in twelve or

fourteen hours. Sometimes not until the fourty eighth hour, but very seldom beyond the third day.

The Second Stage, or Stage of Collapse is announced by the pulse becoming small, weak and quick, and ranging from one-hundred and fourty, to one-hundred and sixty per minute:- by the skin becoming cold, even about the central parts of the body, but especially the extremities:- by the abdomen becoming round and distended from the accumulation of gas in the intestines:- by the patient having a weak and anxious expression, a shallowness about the eyes, and almost a passing grasping hand in the stomach, and frequently dizziness and lab-

-arious respiration. Mr. Clark remarks, that the fever which generally follows the rigor, is very hot and accompanied with intense thirst; yet not perceptible to the patient.

The pain which accompanies the disease is generally seated in the hypogastric or one of the iliac regions, and augments its intensity as the fever increases. The situation of the pain, however, is variously described by different authors. Foster says it was seated mainly in the epigastric and umbilical regions; Hulme found it in the iliac; Gordon in the hypogastric; Campbell above the pubis and in the groins; though in some cases says Mr. Clark, the patient did not complain of pain at all, though their course was

rapid and their termination fatal.

Pain. The nature of the pain affords a good indication of the character of the disease. It will sometimes be found to be intermittent, and sometimes remittent. The abdomen is without any unusual sensibility, and the accoucheur often finds it difficult to decide whether the patient is in after-pains, or pains caused by inflammation of the uterus and its appendages. The frequency of the pulse, and the sounds of the hypogastric and iliac regions upon pressure, will assist him to diagnosticate correctly between the after-pains, and the commencement of puerperal fever.

The tongue in the commencement of this disease is generally moist, white and

Sept. but as the disease advances. we will find it covered with a brown, dry and rough fur, and occasionly brown redish sordes cover the tongue and sometimes extend to the gums and teeth. Not unfrequently the brain and great nervous centers are involved in this disease. hence we occasionly meet with delirium, stupor, and singultus. the latter symptoms are common in the typhoid form of the disease.

The patient voids her urine with pain and in small quantities at a time, which is mostly turbid: tormina and tenesmus. too, are occasionally added to her sufferings; and there is often a vomiting of green or yellow bitter matter, and in the large majority of cases. we have in the last stage

a Coffee-ground discharge, resembling black-vomit. An unusual Symptom was noticed by Mr. Clark in a great many Cases, which was a dislike to her offspring, and a refusal to suckle it. Towards the termination of the disease ophthae extend over the inside of the mouth, throat and oesophagus. In setting before you these Symptoms you perceive that I cannot offer any thing new - and shall now take up the Diagnosis.

If the peritoneum proper, and the uterus be inflamed, the abdomen will generally be found tender to the touch and tense and hard all over, the Skin hot, and face flushed, breathing hurried and laborious - with a quick and expanded

. There is scarcely any vomiting in the first s-
-tage. though much pain on pressure. ov-
-er the whole abdomen if the proper peri-
-toneum be inflamed, or limited in extent
if the uterus alone be affected.

After pains may be distinguished fro-
-m inflammation of the uterus, first bec-
-ause in after pains there is always distinct
intervals of comparitive ease:- Second, in
after pains slow gradual. and firm
pressure on the os uteri can be borne but
in inflammation of the uterus, steady pres-
-sure cannot be borne well. Third in
after-pains you will never find the
hot skin and the quick pulse to the
same degree. as they attend in inflam-
-mation of the uterus:- Fever is present in

one and absent in the other.

It is very difficult to say whether the inflammation of the ulcer arises from some local occasion, or from Contagion, or from a genuine Typhus fever, we must recur to the Condition's mentioned as those on which they symptoms depended. In Typhus fever, we find the brain affected, a dark dusky face and eye, and always a varnished like glue from the tongue. This never occurs from any common cause.

In Sub-acute inflammation, on the other hand we have a pulse small and compressible pulse, and but little heat on the surface of the body. In acute inflammation, in addition to these symp-

-tions, we find a hot skin, a moist to-
-ngue, disturbed respiration, a full and expanded or a hard and contracted pul-
-se; and a bright eye.

What can we say as to the Prog-
-nosis. The previous state of the patient's bo-
-dy and mind, as to health and tranquil-
-ity will greatly modify the chance for reco-
-very. Tranquility of the mind is very necessa-
-ry in the puerperal state. Mental asso-
-ciation exert an amazing influence, also m-
-any other simple things. The prognosis
will be more unfavorable in hospital
than in private practice. The fifth is
for the most part the critical day.

Dr. Meigs" Says page 617. if the pu-
-lse be very quick, and the respiration fr-

-equent and small, it pretends great dan-
-ger. If on the contrary, the pulse become
slower, the breathing more free and full,
it is a certain sign of a change for the bett-
-er. The degree of these, is to ascertain
the degree of danger, or safety to the patie-
-nt. A quick pulse, singly considered, is,
at all times, a dangerous symptom, and
the more so if weak and small. The co-
-ntrary indicates safety. If the pulse does
but once begin to become small, and dai-
-ly slower and slower, as from 120 to
112, and then to 100, or the like is to be es-
teemed as one of the very best signs. But,
if it continues at the same number, or
rather quicker and another day slower,
it is ever to be suspected. Nay, so in a

-llible is the beat of the pulse, with respect to number, that though all other Symptoms should abate, and the disease seems to be gone off, yet, if the pulsation do not decrease in in proportion, a relapse, or some other disorder is to be feared.

The diminution of the distention of the abdomen is another favourable sign; also the large quantity of urine secreted by the Kidneys if the looseness of the bowels is followed by relief after each evacuation, it indicates safety. The total suppression of the lochial discharge is pernicious in its influence and discouraging as a sign.

The fatal termination is announced by the eructations, which sometimes occur a day or even two days beforehand. If

these eructations are accompanied with a sound like hiccough - if they are singultiform. you need scarcely entertaine the hope of rescuing the patient from an impending pate. I have thus far endeavoured in my feeble way to set before you a few outlines and quotation of this disease, and shall now take up the consideration of the Treatment. "Obsta principiis. Obsta principiis. this is the word, for every medical man, and especially so in this disease. which is looked upon by some to be the most fearful known.

But, how shall we commence the treatment. and on what plan should it be practiced. The antiphlogistic seems to have the sway. but it, like all others must be resorted to early. or all will be in vain.

venesection, calomel, opium, blisters, pomen-
-tations and diaphoretics, are generally imploy-
-ed, but I think that we should not con-
-pine ourselves to any one set of remedys, but
use our own judgement. I shall first take
up the consideration of venesection, - I am one
of the advocate for blood letting, and look up-
-on it as the remedy, but in order to be
effective must be prompt and copious, a-
-nd should be resorted to within six or eight
hours after the diagnosis is clearly made
-out, Again how far must it be carried,
this is a question about which there is
much viversity of opinion. Gordon, and
the gordonians, says bleed to syncope -
but this will not answer so well in the
congestive or typhoid form, but in

it be synochoid, or inflammatory, the lan-
-cet may be used without fear.

The heart in puerperal fever beats with
double intensity, and the pulse at the w-
-rist will be found to rise to 120 to 180
or even 160 per minute. Therefore we must
keep down the great frequency of the pu-
-lse, in order to lessen the call on the S-
-ources of the heart's action at the origin
of the vagus and in the sympathetic
arches. If we lessen the evolution of an-
-imal heat, than we decrease the intensi-
-ty of the respiration and circulation, the
blood being the natural stimulous of
the heart. I would suppose that the
removal of a portion of that fluid w-
-ould greatly diminish the force with

which the heart contracts, and as an inflamed part contains a preternatural quantity of blood, as with the exception of resolution and mortification, which are terminations of inflammation, all the events of inflammation consist of the expulsion of certain parts of the blood from its containing blood vessels! Would not the amount of these expulsions be checked, and limited by lessening the supply of blood to the inflamed part, as well as abating the force with which the heart contracts, and the blood reaches it:- I am under the impression that it would. Again we find that the blood forms the pabulum of the whole process. "It says Mr Lawrence, "we may be allowed to use figurative language

the obvious increase of heat in the part, is analogous to that of fire: the blood is the fuel by which the lamp is kept burning: in fact if we could completely take away its blood from a part, we should then be able entirely to controle or arrest the increased action.

Leeches or Cups applied to the abdomen over the seat of the pain, are preferred by some modern practitioners to general blood-letting. but the great danger in the application of cups or leeches is that the patient is exposed to pain, damp and exhaustion, and frequently the orifices, will continue to pour out blood for hours, and even days. but still after general blood letting has been imployed. they

may be used with caution.

Calomel and opium. ten grains of the former. and 1 of the latter. given after the depleting measures have been used, seems to have great beneficial effects. in checking the disease. the opium decreases the cathartic influence of the calomel. while the calomel excites the secretory office within the alimentary canal, and also produces a sensible degree of mausia, which has a checking influence on the intenseness of the inflammation. thereby moderating the threshing power of the heart. so much. that it prevents the increase of the fibrinous element of the blood.

Purgatives are useful in every form of the disease. Gordon gave mercurial purges. Consist-

-ing of Calomel and jalap, in large doses, and kept up a catharsis throughout the whole course of the disease.

Emetics of ipecacuanha grs 15 were administered to all the patients during the epidemic of 1782, at the Hotel Dieu, and followed by a mild aperient the next day. and the success was wonderful! Two hundred, out of two hundred and five patients, were cured.

Blisters are warmly recommend by some practitioners and condemned by others. When applied, they should be placed over the seat of the pain. In the inflammatory form of the disease, after blood-letting, they cannot fail to be useful.

Fomentations, flannels wrung out of hot

water, or a flaxseed poultice, placed between pieces of flannels, or muslin, than sprinkled with oil of turpentine, and applied over the whole abdomen, are universally employed in all the varieties of the disease.

Mercurial preparations are highly recommended by M. Vander Gande and others, administered with a view to produce salivation as quickly as possible.

Diaphoretics, consisting of nitre calomel and tartarized antimony, of blue mass opium and ipecacuanha, with a view to produce perspiration and assuage pain, have been highly extolled by some.

There are many remedies by different men now in use, but whatever the case may be, the agents to be employed must be given

with promptness and without delay

I will now take up, and lastly the Prophylactics.

First, we should beware of epidemics, and if they have their origin in any morbific cause in the atmosphere: Search them out diligently, and remove or Counteract them.

Second, exciting causes, violent mental emotion, must be Carefully avoided. Difficult labour is an exciting Cause, the too removing of the placenta too hastily, and allowing small pieces to remain. Guard against Constipation of the bowels, all of these Causes must be Strictly avoided.

Counteract the infection in lying-in hospitals, free ventilation and Cleanliness, are invaluable prophylactics. Again each pa

-tient should be allowed a separate chamber and every preventative measure should be used by physician, nurse and patient to prevent the progress of this disease.

And in conclusion you will allow me to admit that which you have already observed, that I have undertaken a theme too great for a volume and far beyond my abilities. I have failed to bring before the month of the facts, that which I have pondered over [illegible], that which I have scrutinized carefully, and am at last constrained to unite in the sentiment of all candid medical men, that the disease is still "the pestilence which walketh in darkness," entailed upon her posterity by "the mother of all living."

An Inaugural Dissertation

on

Hybrid Vices.

Submitted to the examination

of the

Board of Regents and Faculty

of Physic

of the University of Maryland

for the Degree of Doctor of Medicine

by

Robert Fleming

of

Virginia.

[illegible] require it.
[illegible] the pain and tenderness of the abdomen, blood must taken by means of leeches [illegible] and warm fomentations [illegible] over the surface.
Cold sponging over the surface [illegible] is often beneficial [illegible] willing to the patient. [illegible] its application, it is generally to be guided by her feelings.

[illegible]

[illegible] Ipecac. [illegible] or Dover's Powder may be given with advantage.
Diarrhea may be [illegible].
[illegible]
[illegible] of the [illegible] should be [illegible]
Opium if indicated.

An
Inaugural Dissertation
on
Hernia
submitted to the examination of the
Provost, Regents and Faculty
of
Physic
of the
University of Maryland
for the
Degree of Doctor of Medicine
by
Scott F. Smith
of
Virginia
1857

Hernia

In viewing every object of created nature, no matter how small and insignificant, or how grand and intricate, we behold, in it, alike, the workings of a superior being; so it is with the structure of the human body, each and every fibre, fascia, vein, artery and muscle, are all placed in their proper position, and fulfilling alike their respective ends. On coming more particularly to view the abdomen, we find that the component parts of that great structure are placed in their respective positions, with an exact order and simetry that it is possible to conceive, and each fulfilling alike, the great ends for which they were intended. The use of the fascia & muscles of the abdomen are alike threefold. The (1st) great use of them is to prevent the viscera and great internal vessels from external injury; (2nd) to assist in respiration; and (3rd) lastly though not

cast to keep the viscera in its proper position.
The viscera of the abdomen are kept in their
proper places by the diaphragm above, pelvic
bones and viscera below, the vertebral column
behind and the muscles and fascia in front.
Thus we see, that the front parietes of the
abdomen are the weakest, and consequently
the escape of the viscera takes place easier at
that portion, than at any other, and experience
shows that it is indeed the vulnerable portion.
Now that same infallible teacher, (experience)
which shows to us, that the front parietes
are the weakest, also shows us, that there
are certain portions of those walls, that
are weaker than others, and dissection
confirms the statement; for by it we find
that there are certain deficiencies or openings
in the lower portion of the muscles, through
which the vessels of the body pass. The
deficiencies or openings are all designated
by their respective names, and are often

the seat of displacement, or protrusion of the viscera. This brings me to my subject proper, that is Hernia.

Inguinal Hernia.—In the lower part of the aponeurosis of the external oblique is an opening, which gives passage to the spermatic cord. It is situated, little less than an inch from the pubis in males and a little over, or about an inch in females, and slightly above it. Its direction is downwards and inwards, and is triangular in shape, with its apex above, where the fibres diverge, and its base below, which is formed by the crest of the pubis & a small portion of Poupart's ligament. The sides of the triangle are called inner and outer pillars or columns. Its apex is strengthened by transverse fibres which pass between the columns & are called the intercolumna fibres. Beneath the external oblique is the internal oblique. The lower fibres, rising from the outer half of Poupart's ligament

makes a crescentic curve, and are inserted into the
spine or crest of the os pubis. The transversalis
is inserted and blended with the internal oblique, as
not to be seperated by dissection, it describes
the same curve makes the same arch, & has the same
insertion. The blending of the two is called the
Conjoined tendon of the internal oblique &
transversalis muscles. This tendon is placed
exactly behind the external abdominal ring,
& forms a protection for what would otherwise
have been a weak point of the abdomen.
The Inguinal Canal. The
inguinal canal is the road through which the
spermatic vessels pass on their way from the
belly to the scrotum. The point at which
the vessels enter the transversalis fascia,
is the internal abdominal ring. The ingui-
nal canal is the tract between the entrance & exit of
the testicle from the walls of the abdomen. In com-
ing through the walls of the abdomen, the cord does
not pierce directly through the muscles, but

Dissects its way obliquely through, forming the Inguinal or Spermatic canal. This canal is one and a half or two inches long & has a direction upwards & outwards, & is parallel with, & about one fourth or half above the inner half of Poupards ligament. In front of the canal is the aponeuroses of the External [illegible] — below is Poupards ligament, above the conjoined arch, and behind the conjoined tendon of the Fascia transversalis. In the foetus the testes are not developed in the scrotum, but in the cavity of the abdomen, lying below & in front of the Kidneys about the fifth month of Pregnancy the testes begin to leave this point & to travel to their final destination in the scrotum, which they generally do by the seventh month of utero-gestation.

How do the testes perform this journey?

They descend along the Psoas muscle & pierce the thinest part of the walls & present themselves in the scrotum, after having come beneath the conjoined

arch where there is a deficiency just above the
inner half of Pouparts ligament, & just behind
the external abutment of the arch, where the
deficiency occurs in the transversalis & internal oblique muscles: having pushed before
them the peritoneum & transversalis fascia.
So dexterous has been their course that
they have effected their escape without perforating a single tissue. According to this account
it would seem that the Inguinal canal, is the very
way traveled by the testes, from the point where
they first begin to push (Internal abdominal ring)
to the triangular opening in the external oblique,
where they escape, — passing to it, convoyed each
they only meet one obstacle, namely Peritoneum &
fascia transversalis. They resist at first but after
a fruitless attempt, as it were, they are pushed before
each one like the finger of a glove. These two structures accompany the testes to the Scrotum & form
a part of their investment, the peritoneum within
& the fascia transversalis without. As the testes

descend they drag the cord after them & therefore the cord shows the track the testes took. Just at the outer abutment of the conjoined tendon, is the point at which the testes push the pouch before them. The spermatic cord fails to fill this canal at first, but the peritoneum wrinkles & closes around it & shrinks to the size of the cord; but the fascia transversalis retains its former dimensions & is too large for the cord which now occupies it.

The Internal abdominal ring is the unshrunken fascia transversalis, which is larger than the cord. The fascia transversalis has no connection with the transversalis muscle & is named from its lying beneath it. It is a thin white sheet lying between the peritoneum and transversalis muscle. Now we should remember that if the transversalis fascia had shrunken like the peritoneum, there would have been no internal abdominal ring. Sometimes the peritoneum does not shrink, which is the cause of Congenital Hernia.

We have seen that the testes in finding their way to the scrotum, acquire two coats, one from the peritoneum & the other from the fascia transversalis. they also carry a few fibres from the conjoined arch with them, forming a loose wire net work, or thin covering in which they lie, but these fibres still retain their connexion with Poupart's ligament & form the Cremaster muscle. This is a volatile muscle. Lastly as the testes emerge from the external abdominal ring & descend to the scrotum they carry a thin layer of membrane with them called the Intercolumna or Spermatic fascia. The testes having pushed these various investments before them, retain them through life. Now we must recollect that after the shrinking of the peritoneum around the cord, there is still a vacant place between it & the fascia transversalis, & it is through this space that the viscera escape in Inguinal Hernia. Hernia is the protrusion of any

viscera from any contained cavity. In the abdomen the small intestines generally protrude and when this portion occupies the canal, it is called Enterocele; if the omentum occupies it, it is called Epiplocele, and if both occupy it, it is called Entero-epiplocele. Which is devided into direct & indirect.

In Indirect Inguinal Hernia a small knuckle of gut presents itself at the internal abdominal ring, but the peritoneum having closed around the cord, it has to push away a second layer of the peritoneum before it, then occupies a space next to the cord. If it should proceed to the scrotum it is called Scrotal Hernia. If it only can protrude & not get to the scrotum it is called Bubonocele. The coverings which the gut acquires when in the scrotum, are (1st) peritoneum, (2d) fascia transversalis, (3rd) cremaster muscle (4th) inter columna fascia. It is one thing for the gut to follow the course of the inguinal canal, and another

or it to bulge directly through the external abdominal ring; if it bursts directly through it is called Direct Inguinal Hernia.

Direct Inguinal Hernia is very rare. The conjoined tendon being very strong does not easily submit to pressure from behind. When it does occur it is the result of violent strain. The inguinal fossa is divided into two parts (external & internal) by the umbilical ligament of the bladder, and after death we are able to tell what kind of hernia the patient had. If the opening in the peritoneum be to the inner side of the umbilical ligament, we may be sure it was Direct inguinal hernia; if it be to the outer side it was an Indirect inguinal hernia.

Mode of ascertaining the existence of Hernia. This disease is generally produced by violent straining efforts, by which the walls of the abdomen contract upon the gut & by continued pressure force it through. **Symptoms.** The

patient is conscious of a little pain & weakness in the groins with swelling. The tumor appears when standing, but disappears when in the recumbent position; he also perceives the tumor receives a slight impulse when he coughs or sneezes. It attracts but little attention, & causes but little inconvenience at first, he being only sensible of weakness which is cured by pressure

Differential Diagnosis between Direct and Indirect Hernia. In direct inguinal hernia the knuckle of the gut pushes the conjoined tendon before it. The tumor is not large, nor does it descend so far as indirect hernia, & is generally globular. In inguinal hernia if you pass on the inguinal canal you have a sickening pain. Indirect Hernia has its tumor inclined outwards & from the middle line. Lastly in indirect hernia the gut descends in front of the cord & on the outer side of the ring, whilst in direct hernia the cord is in front

and to the inner side. A truss is applied in indirect hernia, over the internal abdominal ring; if it were put over the external ring we would prevent a scrotal hernia, but not Bubonocele. The pad should be so placed as ~~not~~ to guard the internal ring as well as the inguinal canal, for if we were not to take particular pains & get the pad of the truss over the internal ring a portion of the gut might slip into the canal & by that means be compressed by the truss & cause great inconvenience to the patient. In indirect hernia the pad should be so placed as to guard the external ring.

Strangulated Hernia is produced when there is a constriction around the gut, & which is so tight as to prevent the passage of feces & circulation of the blood in the parts. The formation of an adhesion of the gut to the scrotum is a frequent occurrence, thus preventing the gut from returning to the belly. The constriction of the gut is known by a violent

pain in the belly of such severity as to prevent the patient from walking. Constant desire to pass fecal matter without success. Endeavours to vomit, matter from below the stomach is often thrown up. These symptoms continue until mortification sets up when the patient is relieved by the great Physician, death. These conditions of things are manifested by cold skin — clammy sweat — feeble pulse & great debility — death is mostly the result. Strangulated Hernia may be caused by a collection of hard fecal matter in the gut, or by constriction. If it is the result of constriction, it must have taken place at one of the rings or at the neck of the sack. If it occurs at the external ring, it is caused by fibres of the external muscle. If at the internal ring it is caused by fibres from the conjoined arch. When a patient comes with hernia, you must endeavour to return the gut & if you succeed & healthy functions go on, a truss may be applied.

How to perform taxis. If the gut be

strangulated you must first patient in a position to relax all his muscles. Put him on his back or belly, with his legs flexed & rotated inwards. The surgeon should take the tumor in his hands & apply gentle pressure, pushing it upwards at the same time working his fingers. This mode of operation should be abandoned in half an hour if not successful. You must next relax the system by bleeding, warm baths, Tartar Emetic and opium. Opium may be given in two grain doses every hour for two or three hours, and after the gut will slide back, and the patient will be relieved. If all this treatment should fail an operation must be performed

Operation. The surgeon divides successively the coverings until he reaches the peritoneal sack. He then opens the sack "with care" and passes his finger to the seat of the constriction and relieves it by making an incision. There is some difference of opinion as to whether the peritoneum should be cut or thrust back while covering the gut

But the general rule, I believe, is to cut the gut. The epigastric artery runs along the inner edge of the internal abdominal ring & the surgeon must take care not to cut it in performing the operation. Should the constriction be at the internal ring, you must cut upwards & outwards; if at the external ring, cut upwards & inwards

Method of distinguishing Scrotal Hernia from Varicocele. The chief bulk of the spermatic cord is made up, of a plexus of blood-vessels, called varicose veins, in which the blood collects & is prevented from returning to the heart. It is found generally in old persons. When the veins become congested it is called varicocele.

Signs in varicocele. (1st) There is a peculiar feel to the fingers similar to a bag of worms. The spermatic veins of the right side, or stone go to the vena cava & empty into it, whilst those of the left side ascend & empty into

the Renal vein. Some think, that the tortuous course of the left vein produces varicocele, as it occurs mostly on the left side. The right vein not having to make an angle to reach the Vena cava. Others think the passage of the vein under the Sigmoid flexure of the colon is the cause.

(2nd) The chief manner of distinction is, if the patient lies down in hernia, the tumor disappears, & if you place your hand over the ring, the tumor will not reappear. But if in varicocele the patient lies down the blood disappears, not having to contend with the laws of gravity. Now if you place your hand over the ring you increase the congestion & consequently the size of the vein, by stopping the flow of blood to the heart

Often mistaken for Hydrocele which is a collection of fluid in the serous coat of the testes You can tell this disease from hernia, from the fact that in the latter disease the tumor is increased in size from upwards downwards

whilst in hydrocele the fluid is in the bottom of the sack & increases in size from below upwards. There is also fluctuation on percussion in hydrocele.

Femoral Hernia

This variety of hernia is a protrusion of intestine at the opening near the passage of the large vessels to and from the thigh. We have seen that between the broad muscles of the abdomen & the the parietal layer of peritoneum, a cellulo-fibrous tissue is found, called fascia transversalis, & that Pouparts ligament is continuous with a semilunar lamellar called fascia iliaca which is the aponeurotic investment of the Psoas Magnus & Illiacus muscles. Along the outer half of Pouparts ligament, a different arrangement prevails. Fascia lata continues by the iliac vessels, (artery & vein) to the thigh, forming the sheath of the vessels, whilst the fascia iliaca form s the back of the sheath. At Poupart's

ligament the iliac vessels do not really occupy the sheath thus formed for them, but at about an inch below Poupart's ligament the sheath shrinks & adapts itself to the sides of the vessels, filling them closely. The inner unoccupied one third of the sheath is called the Femoral canal and the upper inner orifice is called the Femoral Ring. Boundaries. Femoral vessels to its outer side, Gimbernats & Hages ligaments to inner side, Poupart's ligament in front & os-pubis behind. It lies in External iliac fossa, just below and internal to internal abdominal ring, the epigastric artery divides them one. Femoral Hernia, results from the intrusion of a portion of the intestine into the space room of the femoral canal. But when this knuckle of intestine has protruded an inch or so in company with the iliac vessels, it is arrested, for we have seen that the sheath closely fits the vessels at this point. The femoral ring is closed by parietal Peritoneum, besides a layer of delicate subserous

cellular tissue. All these structures are pushed before the intestine when it protrudes into femoral canal. In studying the long saphenous vein, we find that it enters the femoral vein just behind Poupart's ligament & to accomplish this it has to pierce the deep layer of superficial fascia, fascia lata & deep portion of fascia lata & the sheath of the vessels. The orifice is almost it's own size, but in the superficial fascia lata it makes a crescentic opening. If there had been no long saphenous vein, no tumor could have been formed on the inner side of the thigh; for we have seen that the gut is arrested at the contraction of the sheath of the iliac vessels; but the saphenous vein having made an aperature in the superficial fascia lata, the gut pushes the sheath of the femoral vessels before it, & as it bulges forward, forms a tumor on front of the thigh. Having traced the gut from the cavity of the abdomen through the femoral ring into the femoral canal, through the saphenous opening, & having seen

that it forms a tumor on the front of the thigh about the size of an orange, let us see what coverings it has. When the tumor is in the groin before emerging from the Saphenous opening the coverings are peritoneal sack, septum, sheath of vessels, ant lamellae of fascia lata, superficial fascia and integumento. After the gut has passed through the Sephenous Opening it has first the peritoneum crebreforme fascia & layers of superficial fascia & skin Having traversed the femoral canal, pushes the sheath of the iliac vessels before it, as it bulges from the Saphenous opening into superficial layer of fascia lata

Method of distinguishing Femoral Hernia from Inguinal Hernia.

Inguinal hernia is most common in males, femoral in females. The crual arch or space between Poupart's ligament and the border of the pelvis

is much larger in females than in males; and the structures passing through are also much smaller in females than in males, and consequently gives easier exit to the protruding gut. The tumor in a Femoral hernia is about the size of an orange, has a pyriform shape; and after it emerges from the Saphenous opening it rises upwards towards Poupart's ligament, so that the largest part of tumor is above, whilst in Inguinal Hernia the smallest part is upwards.

Method of Relief. The patient should be placed in the recumbent position, with his shoulders and thighs raised, his legs should then be flexed upon his thighs and rotated a little inwards, this last should be attended to, as it is all important, for it relaxes the constricted part and enables you to

proceed with the reduction with great ease. (By) grasp the tumor & push it below the saphenous opening and then push it up in the axis of the canal. The tight is the stricture that in some cases we fail in reducing it; under such circumstances an operation must be performed.

Psoas abscess may be taken for this disease, it resembles it in its situation — in dilating when the patient coughs & also in its disappearing when patient lies down. It may be distinguished from it, by being more external & also by its being attended with symptoms of disease of the spine.

Treatment is very much the same as the other variety.

Scott J Smith

An

Inaugural Dissertation

on

Inflammation

Submitted for Examination

To the

Provost Regents and Faculty of Physic

of the

University of Maryland

For the Degree of

Doctor of Medicine

By

Alfred M. Whiteford

Inflammation

Inflammation – whether regarded as idiopathic in its origin, or considered with light of a distinct morbid disease, or as a series of vital phenomena, consequent upon mechanical injury, interrupted secretion or excretion, persistent irritation of the sentient nervous extremities from capillary distention; is a subject fraught with the deepest interest to the medical practitioner; in as much as we find inflammation either preceding or following the majority of human maladies

It is important and instructive, to notice the many events that arise in the progressive development of inflammation, from the symptoms of its first inception to its ultimate products; whether as affecting the

cerebrum from pression into the ventricles of the cranium— the faculty of speech from closure of the cordes vocales by œdeme or plastic lymph— the limitation of pneumonic function by serous intervention, displacement and compression of the lungs— the incarceration of the heart, by bands of lymph, and serous infusion between it and its investing membrane; with a long train of subjective maladies— the agglutination of a fold of intestine to the parietes of the abdomen, or to a contiguous fold antecedent to perforation of the intestinal coats; securing the peritoneal cavity from certain invasion — or of the lungs to the diaphragm the diaphragm to the stomach; into which an abscess may be finally discharged; the stomach to the liver &c — the curtain of the

eye forever drawn by the sound iris - The harmony of sweet sounds unheard - by a thickened membrani tympani - of odors unevolved, but unobserved, from obliteration of the olfactory apparatus - in every region of its invasion it is interesting to pursue it, and to detect inflammation; when and of what grade and period of its progress, is of first importance to its successful Treatment

Inflammatio, phlogosis, phlegmasia - It is unimportant however we derive this term in as much as no general definition is sufficient to embrace all the forms in which inflammation presents itself

Every tissue is subject to its invasion however deeply seated or obscurely removed - the cavities of bone or bone tissue, endosteum

or periosteum — Inflammation commences as it is yet does not attack with indiscriminate intensity or with equal frequency — It is more easily excited by external causes and is therefore of more frequent occurrence than any other malady, and in those parts of greater vascularity. —

The outward signs of inflammation as it displays itself externally, are pain, redness, heat and swelling; when these symptoms coexist they indicate inflammation

Inflammation is essentially a morbid action and is at variance with healthy function and structure — It is devided into acute and chronic these devisions being based upon the periods of its duration

In the acute form the duration of it is

brisk, the action proceeds rapidly through its various stages, reaches its culminating point, then declines with corresponding alacrity

In the chronic form the action is sluggish weeks and months are occupied in arriving at its height, and its decline is tedious and frequently imperfect

The two forms may be conjoined, the acute may pass into the chronic, by being modified or partially relieved by treatment,

The symptoms of both these varieties are the same although those of the chronic are much more mild, and less distinctly marked than in the acute form — In acute inflammation, the constitutional symptoms are well marked depression, coldness, aching in

the back and loins limbs &c, languor, nausea
headache a small quick pulse; with a general
feeling of discomfort.—
In inflammatory fever this condition is fol-
lowed by rigor or shivering, which is soon suc-
ceeded by a sensation of heat of the whole
surface with a full strong pulse — This
is the mark or sign of reaction and is of
great practical importance; it signifies that
the system has shaken off the temporary depression
which weighed it down, and has awoke with
renewed energy, and excited action. This is
the tide of inflammatory activity, and the
Critical period which demands medical in-
terference, which if interposed with enlightened
judgment will almost always lead to a decisive
issue; this crisis passed without interference

the inflammatory current runs on to one or other of its several events. ——

We shall speak now of the local symptoms of inflammation. — These are redness pain heat and swelling. ——

Redness thus arises from the great influx of blood to the part involved. — The vessels are unusually gorged with blood, but that blood is preternaturally red, caused by the secession of the liquor sanguinis from the tissue threatened with stagnation; leaving the over distended capillaries filled with an agglomeration of red corpuscles — The extreme vascularity of certain parts when inflamed as the conjunctiva, has been supposed to depend, in part on the formation of new vessels; this however is not

so in the initiatory process of inflammation: it yet may nevertheless may be an ultimate sequence — That the vessels which naturally circulate red blood are actually distended in inflammation there can be no doubt, as we learn from the experiments of Hunter, who excited inflammation in the ear of a rabbit — He next injected the head and ears from the aorta: the fluid injected with equal force through the carotids and to each ear — The arteries of the inflamed ear where found to be enlarged one third greater than their natural size, and others developed that had no counterpart in the sound ear — — The tint varies according to the character, the nature of the tissue and accompaniments of the action: active and

do in the initiatory process of inflammation:
that may nevertheless may be an ultimate sequence
— That the vessels which naturally circulate
red blood are actually distended in inflammation
there can be no doubt as we learn from the experi-
ments of Hunter, who excited inflammation
in the ear of a rabbit — He next injected
the head and ears from the aorta: the blood
injected with equal force through the carotids
and to each ear — The arteries of the
inflamed ear when found to be enlarged
one third greater than their natural
size, and others developed that had
no counterpart in the sound ear —
— The tint varies according
to the character, the nature of the tissue
and accompaniments of the action: active and

Sthenic inflammation exhibits a bright arterial red; the chronic and asthenic, a dark livid or purplish hue as we often observe in pustular opthalmia — Biliary derangement may give rise to a purplish-yellow hue as in bilious erysipelas. — In inflammation of the internal parts it is highly probable that redness is an accompanying phase in the inflammatory process; yet redness is seen after death where no evidence of its existence was exhibited during life; but neither does its absence warrant the conclusion of its non existence during life. Mere fullness of the blood vessels where no inflammation existed probably disappears on the sudden subsidence of the vis a tergo with the parting breath, leaving the parts in their natural aspect, as occurs in

— In the third stage the fibrinous deposit is continued but of impaired plasticity and with it is mixed, blood extravasated entire, the result of vascular lesions, ultimately purulent formation is more or less advanced — These effused fluids are probably but modifications of blood — Blood serum plastic-lymph pus when met with are evidence of inflammation having been at work —

Swelling like redness does not always indicate inflammation. It is of slow development not suddenly, like sanguineous infiltration consequent upon a blow, neither is it of tedious growth like the genuine Tumour — The tendency of swelling is to the relief of the part — The degree of swelling depends partly on the intensity of the inflammation, and partly on the

on the structure of the tissues involved. — It proves in the last degree injurious by pressing upon delicate parts as the brain, but in a loose texture to its relief as in fibro-cellular tissue; in parts that are unyielding, care and attention is necessary to avert serious injury, as in the fibrous periosteum, but beneathe the conjunctive comparatively harmless; if on the cornea the tendency would be to lose of parts (gangreen). — Swelling exists also without inflammation; as in anasarca. — In sclerotitis, there may be no appreciable swelling. —

Heat — This is the most important phenomenon of inflammation. — One great cause of heat is the rapid flow of an increased quantity of arterial blood to the affected; part notwithstanding this arterial source of heat, we find the thermometrical measurement gives but little elevation above the natural standard. — 167° of Farenheit being the maximum. — This vital heat is not accumulated

in the part but is free caloric, radiated. This elevation above the natural, or standard of health exercises a deleterious influence upon both texture and function: but is not brought about altogether by vital action, but is due to chemical changes also.

Pain. Is a very characteristic symptom, it is caused by the effusion and consequent tumifaction acting a a mechanical irritant, and increases as the tumifaction advances particularly if the parts are unyielding the degree of sensitiveness enjoyed by the part in its normal condition, greater in the skin and periosteum than cellular tissue. —

It is a circumstance in the character of pain that though it is unusually aggravated upon pressure; that pressure uniformly applied will abolish it altogether as in the treatment of orchitis. —

The tendency of pain is salutary if not too severe

for if the action of inflammation were painless, texture, function, life itself might be lost before we were aware of its existence.

The predisposing causes of inflammation — These may either act on the general system, or on the part itself. — Debility general and local, is unquestionably one of the greatest of this class. — The morbid condition of the vital powers renders the whole system liable to disease. — Thus inflammation is a cause of inflammation, and all causes that produce debility, as bad food, air, and intemperance, excessive and habitual exertion of mind or body, nervous irritability, excessive evacuations, straining of the eyes, &c, causeing a determination to the parts and heightening the sensibility. — In short increased arterial action leads to sthenic or active, diminished flow of the nervous circulation to asthenic or passive. — Exciting

causes — Direct injury. as irritation, pressure lodgement of foreign bodies, and the application of poisons, heat & cold &c. —

Most authors give four terminations to inflammation, viz. adhesion suppuration ulceration and gangrene — Resolution effusion granulation and cicatrization are not properly considered terminations of inflammation, but the products and effects that coexist with it. —

In the blood we have four principal constituents, fibrine, albumen, salts, corpuscles, — suspened in liquor sanguinis. — Much the greater part of the fluid consists of water or serum. — Fibrine is the assimilating principle to which the reparative operations are due, for the restoration of lost parts. — During the healthy excitement, fibrin is deposited by the exudation corpuscles formed in the

surrounded by pus sanguinis; the pus in assimilating with the surrounding tissue becomes organised and forms part of it. Excitement once begun and the irritation prolonged, the flow of blood will be more and more accelerated; the red corpuscles will be seen crowding together and the colorless corpuscles will be increased in direct proportion to the excitement; under the microscope the irritated web of the frog's foot will clearly exhibit this result; the over distended capillaries relieve themselves by exosmosis into the cellular tissue; tumefaction, pain, and an elevated temperature is now the consequence. If the activity of the vital force fail to accomplish or restore the healthy circulation to the parts involved, the inflammatory process advances, death of the effused fibrin, and the vitality of the tissue lost, the products of the inflammation pass to the gangrenous

the phisical laws; the result is — suppuration. —
The parts now become softened from the contained
products, interstitial absorption is begun greatly dis-
proportionate to the effused compounds; the super-
ficial particles are ejected from the surface; and
now we have ulceration; if in osseous tissue exos
tosis occurs. Suppuration if arising in inter-
muscular facia will exhibit itself as diffused in-
flammation with sloughing as in erysipelas, and
fever of a typhoid type exhibits itself. —
Inflammation now borders on gangrene —
If the effused fibrin be of low plasticity the parts
will be left unprotected; the fibrinous septum or
floor is imperfectly formed and being speedily
reabsorbed; and an eating ulcer is unfolded
(phagedena). — This occuring to internal surfaces
would soon be manifested, by great depression of the

of the powers of life. The altered secretions particularly of the cutaneous glands give rise to sordes; the pulse increased in frequency, but diminished in force and volume anorexia, nausea, clammy sweat, hiccough and collapsed features. ——

Inflammation is clearly an abnormal action of the system, creating altered nutrition, and retarding circulation which leads finally to causing mortification of the tissue. ——

General Treatment of inflammation — Removal of the exciting cause is indispensable as a first step in the cure. —— Blood-letting. — General bleeding is not invariably necessary. — When it is clearly indicated the effect produced and not the amount is the guide. — Inflammation of the acute form engenders great tolerance of depletion but sex age and temperament varies the tolerance. — Whether blood should be drawn in the erect position or recumbent —

is disputed — It is affirmed by some that, bleeding in the erect position leads often so so soon to syncope that the object of Bleeding is thereby defeated. It ought to be born in mind that there is generally a temporary reaction but soon passes away, and should not be mistaken for a renewed display of the inflammatory excitement. —

The first effect produced by blood letting is sedation of the heart and general circulatory system, and secondly the diminution of the volume of blood, obviating the determination of blood to any one part (derivation). Thirdly diminishing the morbid impulse of the blood, thereby facilitating the action of other remedies, as mercury and opium. —

When reaction comes on, we must be guarded. It is not of asthenic character; which is evinced by a quick soft jerking pulse, headache oppressed breathing, and nervous excitement; an opiate is here the remedy. — This is the frequent condition the initiate or victim to maia a potu

sthenic reaction should meet boldly with the lancet. —

Local Bleeding — This is employed to continue the sedative effect, and also to relieve local congestion. — Local depletion is effected by cups, leeches, scarification, punctures. — Lesfranc recommends that when blood is taken from an inflamed surface that it should be drawn in large quantity, otherwise the congestion will likely be increased. Leeches are employed when we only want to draw off a small quantity of blood, or where cups would be inadmissible as over the abdomen in peritonitis. — In children the superficial veins should be avoided, also the eyelids. — Purgatives are next in importance to blood-letting: these when so used to affect the surface of the mucous membrane of the intestines, have the affect of removing faecal matter which irritate and prevent the action of other remedies, and by carrying from the surface of the membrane mucus they aid the action of blood-letting. — Neutral salts of the alkalies with the mineral acids and other renal depurators, acetates & tartrates &c. — Alkalies from their solvent power over albumin decomposing

it lessening the amount of plastic material, and tend to some extent the ultimate deposition of corpuscular and fibrinous lymph, are also useful in inflammation. — Tartrate of antimony — this remedy is a great adjuvant to blood-letting and frequently the substitute. It exerts its action secondarily upon the heart; and it is to be observed that the depression produced by this agent is as much to be feared as syncope from blood-letting, as it is the result of the saturation of the blood by a poison: but by carefully regulated doses a continued sedative action on the heart is maintained that could not be accomplished by repeated bleeding — Digitalis is useful as an adjuvant in the treatment of pulmonic inflammation, where there is an unusual quickness of the pulse. Colchicum is used in rheumatic inflammation when it exerts its specific effects — Both these agents are cumulative in the system, and must be used with caution — Mercury — This remedy is used in the beginning of inflammatory diseases can hardly be supposed to exert any other control than that

—The great aplastic property of mercury is especially directed against the products of effusion, hastening their degeneration (and if the vital powers are not too depressed) their consequent absorption — In some constitutions the reverse result is observed — Mercury by diminishing the amount of fibrin and red corpuscles in the blood, in this manner determines the formation of this less highly-vitalized corpuscular-lymph, instead of the more highly vitalized fibrinous lymph and prevents directly adhesions from deposition of fibrin — Mercury is more frequently used and is most efficient in the treatment of inflammation in combination with Opium, and when no gastro-enteric irritation contra-indicates, with antimony; the peculiar effects of the mercury is thus assisted by the antimony sedating the heart, the opium prevents it running off by the bowels, and also acts as a sedative to the nerves. ——

An

Inaugural Dissertation

on

Typhoid Fever

submitted to the examination of the

Board of Regents and Faculty

of

Physic

of the

University of Maryland

for the

Degree of Doctor of Medicine

By

Virgil Clarke Lawrence

of

Maryland

1857

Distinguished Professors, and Gentlemen; it is not with that feeling which a school-boy would seat himself to frame a valedictory; nor is it with that degree of pleasure which the pupils of a college generally look forward to a vacation: when I look to the future, either upon the subject which I am about to write, or the professional path, in which I hope my merit will justify you gentlemen in allowing me to tread.

I do not look forward upon my path of life as being strewed with flowers; nor do I fold my arms and say, my life of minute, and tedious

study is over when you gentlemen
have conferred upon me the degree
of doctor. No: gentlemen: would
you have ever attained that amount
of knowledg, and arrived at that
degree of perfection in your profess
ion, which you all now possess had
you thrown aside your books when
you received your diploma's:.
After nearly three years diligent appl
-ication to the different branches of
medicine, I now am seated for the
purpose of doing that which the
faculty have seen fit in their
judgment, and experience to
tax all those with who wish
to embark in each a liberal and

humane profession. Therefore gentlemen, with these few preliminary remarks, I will at once enter upon that subject which I have selected for consideration.

Typhoid Fever

This is a common febrile affection presenting itself in a diversity of forms, yet having in each some distinctive characteristic. We sometimes see a case in which diarrhoea, and the eruption is the most distressing symptoms, and again we see the disease with all its symptoms in their worst forms.

This disease, though long known to the medical world, yet its different forms could not be identified until after the researches of Louis. who by determining its anatomical in connexion with its exterior character, gave us the means of recognizing it under every variety of aspect.

Symptoms. The disease as it occurs with us, generally sets in insidiously. The patient feels a sense of dullness, and waning loss of appetite, which lasts for several days, when the disease sets in with all its violence. But sometimes the patient is at first struck down by the violence of the disease and from the onset to convalescence in the most imminent danger of death.

In the latter case when the disease begins abruptly the patient experiences a chill followed by fever which rapidly increases followed by the other symptoms in quick succession

As it occurs generally with us, the patient is uncomfortable. general uneasiness soreness or numbness of limbs, and often headache, heated skin, flushed face, accelerated pulse; the tounge found generally slightly coated with a whitish fur, impaired apetite. These symptoms increase generally in intensity with a tendency to remission, for several days. when the patient finds it necessary to take his bed.

The disease being now fairly under way, the ordinary phenomena of fever is presented, frequency of pulse, flushed face, hot & dry skin, thirst, loss of apetite, and general weak-

-ness. The pulse sometimes not exceeding 90 or 100 in the minute and of considerable fulness, and strength, is in other instances especially in females very frequent and compressible, sometimes amounting to 110 or 120 in a minute. Headache in some degree is very seldom absent, being sometimes the chief subject of complaint. The patient often experiences pains in the back or limbs, sometimes there is much restlessness or want of sleep, and not unfrequently epistaxis. These symptoms continue with little other change, than a gradual increase for several days. When the pulse becomes more frequent

and less strong, the complexion deepens; the tongue coats itself with a thicker fur, showing a tendency to dryness. The stomach though often retentive, is sometimes irritable transient pains are often felt in the abdomen, increased by pressure. a tympanitic distention is discovered in the bowels on percussion; with a gurgling sound upon pressure by the hand, Cough sometimes sets in urine occasionally changed. Such is the disease up to the seventh or ninth day. Other symptoms are now added, the tongue previously moist often becomes quite dry, and assumes a brownish colour, deglutition is

dificult, abdomen becomes distended
in many cases, and upon percussion
sounds hollow, and tympanitic. If
the surface be examined red spots
like flea-bites usually appearing
on the abdomen, and afterwards
increasing and sometimes extending
to the limbs, and face. Sometimes
an eruption of small vesicles, called
sudamina may be seen upon the
neck and upper part of the chest.
The nervous symptoms now become
more decided. Delirium or stupor
often takes the place of the headache
singing or buzzing in the ears hardness
of hearing, the eyes often injected the
tongue protruded, with dificulty. Finally

if the disease is to end in death, the pulse gives way. either excessively frequent, and fluttering or slow and scarsely perceptible. the extremeties cool & clammy, abdomen enormously distended hippocratic countenance is assumed, and life is quietly extinguished.

When a favourable termination can be brought about, the tongue begins to clean from its tip, and edges the pulse lesens in frequency, and becomes fuller. the skin relaxes delerium subsids. and in a word all the symptoms abate, and the sufferer with proper caution has a fair sail to convalicance.

In other cases instead of the tongue cleaning from its edges it breaks up in flakes from the center or base leaving the surface smooth and red this is a sign of an amelioration of the symptoms. If when it cleans in this way it remains moist, convalescence may be pretty generally expected though it is always tedious.

If however after or during this cleaning process, the tongue becomes dry the disease is again aggravated, and the patient thrown in danger of death. But convalescence after this mode of cleaning is always tedious, and months may elapse before the patient regains his usual health.

There is a termination of this disease of

peculiar character. The patient is siezed without any premonition whatever with violent pains in the abdomen, which is very tender to the touch. The legs are flexed up, on the body to relax the abdominal muscles. rigors exceedingly frequent pulse. vomiting and constipation are also frequent symptoms.
The cause of this is perforation of the intestines & the escape of the contents into the abdominal cavity, lighting up peritonitis.
As to the duration of the disease, it is uncertain: death may occur the sixth or seventh day, but it is rarely the case: It more generally occurs the second or third week. In other cases it may be prolonged to the sixth week.
The period of convalescence is equaly vari

able, it may commence as early as the eighth or ninth day, but rarely before the third week. The average duration may be stated at from twenty to thirty days and seldom lasts longer than sixty.

Varieties & Complications. In some instances we have only an ordinary fever with diarrhoea intiorism of the abdomen, a few rose coloured spots. Tongue moist & whitish; no vomiting and no considerable nervous disorder. Such cases might be taken for remittent as there is a tendency to remission & exacerbation of the febrile symptoms. Again diarrhoea is the most prominant symptom, and we might mistake it for mucus inflamation. The pectoral symptoms are sometimes most prominent. But upon careful examination we can distinguish the one from the other.

Anatomical Characters. There is scarcely a single organ of the body in which signs of inflamation does not exist. The liver, splen, & heart. The minute & solitary glands of the ileum (or) the mesenteric glands, all have been found to a greater or less degree changed, after death.

Diagnosis. The frequently slow and insidious mode of attack. The diarrhoea or a tendency to it. dull expression, dusky hue of the countenance, cough, and after the seventh or ninth day dryness of the tongue diminution of secretion. Bilious fever is a disease with which typhoid might be confounded But it may be distinguished from the latter by its having a more

decided and regular remission. bilious vomiting of shorter duration, and a tendency to end in intermittent, and the absence of the characteristic symptoms of typhoid fever. But with proper precaution the practitioner can generally decide with certainty after the seventh or ninth day.

Prognosis. Typhoid fever though a serious disease, is said not to be very fatal by most writers. It is however one of those complaints which put on very different degrees of violence. Our prognosis should therefore be cautious. as no case can be considered free from danger.

Treatment. It would not be

advisable to begin the treatment in this affection as we would in other fevers: namely, by active purging. because diarrhoea is often at the commencement if not an unusual susceptibility to the influence of cathartic medicine. But the alimentary canal should be thoroughly evacuated to obviate the injury arising from the contact of irritating matter with this living membrane. Sulphate of Magnesia or Castor Oil, will generally answer the purpose. At times it may be advisable to administer fifteen or twenty drops of Laudanum in combination with the oil. If the operation should be spontaneous & free no medicine of a cathartic na-

-tune will be required. But if the evacuations should be scanty, we should resort to means at least calculated to procure one free evacuation per day. And for such an effect it will be only necessary to give the gentlest cathartics in the smallest doses. A fluid drachm or two of castor oil a single seidlitz powder one or two drachms of Epsom salts, or half drachm of magnesia may be given, and repeated if occasion requires. When the stomach is irritable, or cathartic medicine worry the patient; the same object may be effected by enemata. This should be mild in the early stage but when the tympanitis is considerable, it may be

very advantagiously combined with the oil of turpentine.

The next indication after evacuating the bowels, is to obviate febrile symptoms. Blood may be taken from the arm to the amount of 8. 12 or 16 oz, if the pulse is full & strong, with sanguinous determination to the brain or other vital organ. It is however uncalled for in many cases & might be positively injurious in others. The young practitioner must not forget that this disease runs a certain, and that in all cases of typhoid fever we should husband the strength of our patient, that it would be certainly wrong to bleed unless such a step was most positively indicated: especially as the natural

tendency of the disease is to debility.
The main use of bleeding is to prevent local, and disorganizing inflammation. When this condition is not present or a tendency to it, it is best to omit the remedy. Local depletion has been found useful in many cases when the blood was drawn from the neighbourhood of an inflamed or congested organ. In cases of cerebral fulness, leeches or cups to the temples, or back of the neck, to the chest in oppressed respiration, and the abdomen when tender to the touch.
Refrigerant diaphoretics should be employed from the commencement. The antiminials are recommended by some. But they generally irritate the bowels, and have

a sedative influence when fully employed except in the ardent stages. Some of the other diaphoretics have been recommended the citrate of potassa in the form of neutral mixture, or effervescing draught. This may be given throughout the complaint when the skin is hot & dry & the pulse not very feeble combined with tartarized antic, for the first few days if the stomach is not irritable & the bowels quiet. Spirit of nitric either may be added when nervous symptoms begin to appear. Laudanum may also be added when it produces uneasiness of the stomach or bowels. Either of these may be given every two hours during the day, and at night if the patient be unable to sleep, but it is best for the nights to be

past in sleep. For this purpose a dose of Dover's powder or opii & ipecacuanha, or some other preperation of opii may be given at bedtime. Cold ablutions, are usefull in abateing the heat of the surface. The temples legs & armes, should be sponged with cold water, and when the surface is uniformly hot & dry, it may be extended over the entire surface. When their is much debility diluted spirit may be substituted. Ice & cold drinks should be allowed your patient if he wish it.

There are certain local symptoms which require attention. Headach and pain in the abdomen. For the former leeches, and applications of cold water or ice in bladders.

The latter warm fomentations, or emollient cataplasms, and rubefacients or blisters may be used. When there is tenderness of the abdomen whether over the epigastrium or right iliac region, or elsewhere blood may be taken locally by cups or leeches, over the tender part, mush poultices over the whole abdomen, until all tenderness be removed. In some cases it may be advisable to apply a blister to the abdomen. The diarrhoea may be allowed to take its course unless it should become exausting, then it should be checked with opii & ipecacuanha, and if required acetate of Lead, Kino, Extract of Rhatany, or Tanic Acid, may be added. Nervous symptoms may be quieted often by sweet Spirit of

nitre Hoffmans anodyne or camphorated
water. Opiates may also be used when
not contraindicated. In some cases no
other treatment is required. But again
we see cases after the seventh or ninth
day in which there is a diminution
of secretion. The tongue & skin dry
urin scanty, the pulse more frequent,
but less in volum & strength. under
these circumstances, mercury has been highly
extolled, given so as slightly to
affect the gums. It is here indicated
as an antiphlogistic given in the form
of Blue Pill at short intervals gri every
two hours until the gums, are slightly
affected, it may be associated with ipe
cacuanha if the stomach is not irrita-

-ble, it softens the skin, and promotes bronchial secretion. The nutral mixture may be omitted, or given in connexion with the the mercury.

Under its influence not unfrequently the tongue becomes moist, the skin relaxed, & the other symptoms ameliorate. But should the symptoms not yeald, the oil of terpentine will prove an excellent remedy. In the advanced Stage of all cases, it may be employed, when the tongue is dry. It acts here as a stimulant & alterative, and should be given in doses of from five to twenty gtt every hour or two, in an emulsion of gum arabic & sugar a little laudanum being added if it disturbes the

Stomach or bowels, as the case improves the dose should be diminished. Stimulants and tonics, are indicated in the latter stage of the disease. But if they increase the frequency of pulse heat of skin, or nervous disorder they should be discontinued. Upon the whole wine whey, is considered the best, of which may be given, from one Tablespoonfull to a wine glass-full, every half hour or hour during the day. When the strength is beginning to decline without any abatement of febrile heat, it may be alternated in the small est doses mentioned, with the neutral mixture. Afterwards with the muriated or the oil of turpentine.

And as the strength becomes reduced it is often advisable to add carbonate of ammonia. and it may be necessary to have recourse to the more powerfull influence of pure wine or brandy.

In all stages of this disease Opium is a valuable auxillary, it relieves nervous irritability, promotes sleep checks diarrhoea, and induces perspiration. But it should not be given when the pulse is full, and strong, or the brain diseased. When used as a stimulant it should be given in the dose of ¼ up to gr i every four six or eight hours.

Tonics may be substituted for stim-

ulents when the debility is not too great. Infusion of serpentaria with a little sweet spirit of nitre may be used if it agrees with the stomach.

Bark and its preparations, are useful. Quinine has been thought by some to have the power of aborting the disease. Dr Millenberger professor of Mat Med in the University of Maryland says he has seen this disease cut short by the free administration of Quinine, and in no case has he ever seen any evil effect result from its use under his administration. This however is not admitted by all.

Rubefacients in connexion with stimulant

should be used when there is [illegible] of [illegible] connection with [illegible] of the pulmonary organs which is occasionally the case in this [illegible] & is an alarming symptom. And [illegible] may accrue from the application of cups over the chest. The patients linen should be often changed, to prevent the formation of sloughs from pressure, or friction. The part bathed with spirit occasionally. Attention to the state of the bladder, and if distended with urine draw it off with a catheter.

So far as medicine are concerned there is the course pursued by most writers on practice. But there are some remedies which have been set forth by

[illegible] [illegible] of [illegible] [illegible]

Lead Alum & chloride of soda have been generally recommended as having specific virtues. Great attention should be paid to diet, it should be [illegible] in the early stage. barley water [illegible] tea, toast and water alternately employed, if the patient desire it lemon or orange with cold & ice water in moderation.

The diet should be more nutritious as the disease advances. Sago or arrow root flavoured with nutmeg & [illegible] tea with dry toast [illegible] [illegible] morning & evening. In the prostrate stage animal broths & jellies. Attention should be paid to venti-

[illegible] [illegible] the [illegible].
convalescence should be watched closely
by the physician, bowels kept open
and [illegible] [illegible]
in short in a word brought gradually
back to health.

An

Inaugural Dissertation

on

Fractures of the Lower Extremity

submitted to the examination of the

Provost, Regents and Faculty of Physic

of the

University of Maryland

for the Degree of

Doctor of Medicine

by

Henry Enalard Scott

of

Maryland

1857.

Of the many casualties, to which the Human family is liable, none at the present day seem to require, more particularly the attention of the Medical profession, than that branch of Surgery which treats of the subject of Fractures.

It is in the skill and experience of the practitioner, that the victims of mishap have to calculate their chances, if not for life itself, at least for the possibility of enjoying those functions with which the Creator has endowed them.

It behooves all therefore, to use well those opportunities which may be afforded them. It is a lamentable fact that, to the want of this proper spirit, & by the indifference on the part of those who are not desirous of making such advances in science, many of the slightest casualties become greatly magnified in their intensity. Animated with a desire to improve such opportunities; and with a view to comply with the regulations of the University of Maryland - I have chosen as a subject for a Thesis, Fractures of the Lower Extremity and their Treatment - and have divided my subject into - 1st, The anatomy of the parts & the action of the muscles on those parts; 2d - Definition of Fractures & their varieties; And 3d The modes of Treatment & the consequences attending upon it. . . .

The bones of the lower extremity are the Femur, Tibia, Fibula, Patella, Os calcis, and the bones of the Foot. The Femur being the first bone of the lower extremity, I will describe as being the largest bone of the human body, and as regards its conformation, is peculiar to itself. It is usually divided into the upper and lower extremities, and the middle portion or shaft. Its upper extremity differs very materially from that of the other portions, it presents the head of the bone for articulation with the os innominata at the hip joint, which head forms half a sphere and has a depression about its centre, for the insertion of the round ligament. The Neck of the bone, which is said to be different in all subjects, generally forms an angle of about thirty five degrees. It is somewhat shorter in females, than in males. The two Trochanters, viz, the trochanter major a large process external to the neck above described, presents several facets on its surface,

the oval one, for the attachment of the tendon of the gluteus minimus & the others for the gluteus medius muscle. It also presents the digital fossa for the insertion of the tendons of the pyriformis, obturator internus and externus and the inferior & superior gemelli muscles. The trochanter minor, is much smaller than the trochanter major it is found on the posterior portion of the bone. At the base of the neck of the bone, the tendons of the iliacus internus and psoas magnus muscles are inserted into it. A ridge joins the two trochanters, and there is also one for the attachment of the capsular ligament. The middle or shaft of the femur is somewhat concave, it has a rough ridge on the upper portion, beginning about the trochanter minor and bifurcating, called the linea aspera; it is occupied by the insertion of several muscles; the nutritious foramen is found about the middle of the bone, and the femoral artery, in a groove for its passage

about the condyloid ridge. The lower extremity is the longer of the two and is divided into two condyles, external and internal, which are seperated by a fossa called the intercondyloid. The internal condyle is the longer of the two, and from its tuberosity the internal lateral ligament arises, the crucial ligament arises anteriorly.

The external condyle also has a tuberosity from which the external lateral ligament arises and just below the popliteus muscle arises. The condyles are joined together in front forming the articulating surface for the Patella. The Femur has three articulations and twenty four muscles attached to it. Of these muscles there are attached to it by the greater Trochanter, two extensors of the thigh, viz the gluteus medius & minimus, and six rotators outward, viz pyriformis, obturator internus & externus, two gemelli and quadratus femoris. By the lesser Trochanter, three flexors of the thigh, viz, psoas

magnus, & Iliacus internus & externus. By the linea aspera, two extensors of the leg, Vastus internus & externus, one flexor & extensor, biceps; one extensor of thigh glutæus maximus, and four adductors of the thigh. Pectineus, adductor longus, brevis and magnus. By the anterior part of the bone, two extensors of the leg Cruræus & Sub cruræus and by its Condyles to gastrocnemius, plantaris and popliteus.

We next come to consider the Patella, which is a small bone, situated on the front part of the knee joint, and is nearly oval in shape. The upper portion of the bone is rough and thick for the insertion of the tendon of the rectus femoris muscle. From the lower portion the tendon of the extensor muscles is continued and the front part is entirely covered by this tendon. The patella is said to be to the Tibia what the Olecranon process is to the Ulna And is as a sort of appendage, united by ligament, instead of being a continuation of the Tibia like the Olecranon is of the Ulna.

It articulates with the condyles of the femur, and has attachment to four muscles and the ligamentum patellae. Of these muscles three are attached to it, One extensor of the leg & thigh, Rectus & Three extensors of the leg, the Cruraeus, vastus internus and externus. The leg consists, like the forearm, of two bones, viz; the Tibia and the Fibula, & they differ in their relations to each other much more markedly, than the bones of the fore=arm do. Of the two the Tibia, is the larger, and is situated on the inner side of the leg. It is divided like the other long bones of the body into an upper and lower extremity and shaft, and is almost straight. The upper extremity is divided into two tuberosities; the upper surfaces of which, articulate with the femur. The spinous process is found between these two articulating surfaces, to which the Crucial ligaments are attached. On the front part of the bone, and just below the head, is to be found the tubercle for the insertion of the ligamentum

patellae. On the outer side of the external tuberosity is the articular surface for the head of the Fibula The middle or shaft of the bone presents three surfaces, the external, internal and posterior The external is marked by a sharp ridge for the insertion of the interosseous membrane + the internal is the smoothest and the posterior + is grooved for muscular attachments. The lower extremity of the bone is smaller than the upper and articulates, with the Astragalus, it is quadrilateral in form and is prolonged into a large process, called the internal malleolus.

The external malleolus is formed by the lower extremity of the Fibula. At the lower and outer side of the Tibia the surface is smooth for the articulation with the Fibula. The extremity is also smooth for articulation with the Astragalus. The Tibia, as before stated, articulates with the Femur above, the Fibula at both extremities and the Astragalus below. It has attachment with ten muscles, namely: By the

the internal tuberosity to, two adductors of the leg, sartorius and gracilis; two flexors semitendinosis & semimembranosis; by the external tuberosity to adductor, & elevator of foot, Tibialis anticus; & extensor longus digitorum; by its tubercle to ligamentum patellae; by external surface of the shaft the Tibialis Anticus, and by posterior surface of the shaft to, one flexor & adductor, one elevator of the heel, Soleus, and two flexors & extensors of the toes, viz. Flexor longus digitorum & Tibialis posticus.

The Fibula, is the outer and smaller bone of the leg, it extends below the Tibia, but not quite as high, and is divisible into a shaft and two extremities. The upper extremity is very irregular and presents the articulating facet, slightly concave, for the articulation with the Tibia. The external part of the head has the Styloid process for the attachment of the tendon of the biceps muscle. The shaft is triangular and has an external, internal and posterior surface. The external is the broadest and

winds around the bone, commencing anteriorly above and ending posteriorly below. The internal face looks towards the Tibia and is divided by a ridge, which is best marked about the centre of the bone where the interosseous ligament is attached. The posterior surface is also spiral and commences above posteriorly and terminates below internally; about the middle of this surface the nutritious foramen is found. The lower extremity is triangular and descends backward beyond the Tibia, forming the external malleolus. The internal portion has an articulating surface for the astragalus; immediately above, the bone is rough for articulation with the Tibia. The extremity is pointed and is sometimes called the Coronoid process. The Fibula has articulation with the Tibia and Astragalus, and attachment to nine muscles.— By its head to one extensor & flexor, viz, Biceps; one Elevator of heel, Soleus,— By its external surface of shaft to Peroneus longus & brevis;— By internal

surface of shaft to extensor longus digitorum; extensor proprius pollicis; peroneus tertius & tibialis anticus: By its posterior surface to Adductor & flexor viz Popliteus and flexor of toes, viz; Flexor longus pollicis. —

The bones of the Foot form the third section of the lower extremity. To enter into a minute description of each and every bone contained in the structure of the foot, with their individual peculiarities, and to describe the muscles thereto attached; would consume much more time and space, than would be requisite for the purposes which I intend — I shall, therefore, leave them until I come to describe the fractures of that part.

I will now proceed with the second division of my Thesis, viz; The definition of fractures & their varieties. A fracture is a solution of continuity of a bone, produced by external violence or muscular contraction; and may be said to consist of seven different varieties, viz: 1st Simple; 2d compound; 3d comminuted; 4th complicated 5th Fracture with wound; 6th impacted & 7th partial.

Fractures are either oblique, transverse or longitu=
=dinal, according to the direction with the axis
of the bone in which it exists. A simple
fracture is where a bone is divided into two
parts, without any injury to the soft parts there=
=about. A Compound fracture is where there is
an open wound connected with the fracture.
A comminuted fracture, where the bone is broken
into several parts. Complicated fracture, is when
with fracture, there is injury done to the soft
parts, or blood vessels surrounding the bone.
A fracture with wound, is where a bone is fractured
and the parts receive a wound which does not
communicate with the fracture. An impacted
fracture, is when one portion of a bone is imbedded
in the other; and partial fracture is when the
continuity of a part of the bone is destroyed.
The different diagnostic signs of fracture are,
Great pain, deformity, unnatural mobility, crepitus
swelling and inability to move the affected part.
Fractures are generally caused by direct or indirect violence.

We now come to consider the different varieties of fractures of the Thigh bone. Those which occur in the upper portion of the bone, are very often mistaken for dislocations, and as Sir Astley Cooper, in his able work on Fractures and Dislocations, says, in speaking of these fractures, "That these accidents should not "be confounded with dislocations, or with each other,— "a mistake, which has but too frequently happened. "Indeed, he goes on to say, it must be confessed that "their distinguishing marks from dislocation are "sometimes detected with difficulty, and that the "different species of fracture are also liable to be "confounded with each other &c ++++ "Hence that "difference of opinion which has led to much "discussion respecting the process which nature "employs for their cure."— There are three different kinds of fracture of the upper part of the Thigh bone; viz, 1st Fracture of the neck within the Capsular ligament. 2d Fracture external to Capsular ligament. 3d Fracture through

the trochanter major. — The first variety namely fracture of the neck of the bone within the capsular ligament, is characterized by the shortening of the limb from one to two inches; it is generally ascertained by placing the patient in a recumbent position and measuring the length of each limb from a fixed point of the pelvis.

The connection of the head of the bone being destroyed, the femur is then drawn up by the action of the muscles of the pelvis attached to it: the heel rests in the hollow between the internal malleolus and the tendo-Achilles of the other leg. The foot and knee are sometimes everted, caused Sir Astley Cooper says, by the "numerous "and strong external rotatory muscles of the "hip joint, which proceed from the pelvis to be "inserted into the thigh bone, and to which very "feeble antagonists are provided." Crepitus is noticed, when the two extremities are brought into apposition, by rotating the bone. Women are more liable to this fracture than men,

on account of the greater length of the neck of the bone. This fracture but seldom happens except in old people. The causes are from a fall, or some sudden twisting violence.

There exists much doubt in the minds of many surgeons as to whether bony union is accomplished in these fractures; the general opinion is I believe adverse to it. Sir Astley Cooper says these fractures "generally unite by "ligament and not by bone. This principle I taught "in my lectures for thirty years, and it is a "most essential point, as it affects the reputa= "tation of the surgeon &c". The diagnosis in these cases should be very carefully made, for fear of confounding this species of fracture with the dislocation on the dorsum ilii or that into the ischiatic notch; as in both of these the limb is shorter: they may be distin= =guished by the foot being turned out and the mobility of the limb. There are various modes of Treatment of this fracture and

numerous cumbersome splints, recommended—
I shall however speak more particularly of the
Treatment after I have gone through with the
different varieties of fractures. We next come
to fractures of the neck of the thigh bone external
to the Capsular ligament. The Symptoms
are very similar to those of the fracture above
described: it is produced by severe blows or by
falling on the edge of some projecting body or
on a curbstone. The signs are shortning of the
leg, eversion of the foot, a great deal of pain
in endeavouring to move the parts, & the joint
has lost its roundness. The Diagnosis is
sometimes made with difficulty and it
therefore becomes necessary to take into con-
-sideration the attending circumstances and
also to consider the age of the patient. Whether
or not bony union will take place is consi-
-dered doubtful although it has been accom-
-plished. The Treatment will be similar
in a great measure to the first mentioned

and will be spoken of in connection with that. The next kind of fracture is that of the Femur through the trochanter major. The symptoms which characterize this fracture are great pain, eversion of the foot, the marked alteration in the position of the trochanter, the broken portion being drawn forward, and on moving the fragments crepitus may be observed. The leg may also be shortened. This fracture may occur at all periods of life, and may be from the same causes as those of the other fractures before mentioned. The diagnosis is generally very easily made, and with proper Care and Treatment the patient will generally recover with use of the limb.

We next come to speak of fractures of the Shaft of the Femur. The Signs of these fractures are so very recognizable, that a Surgeon can very soon satisfy himself as to the full nature of the Case. Some of the principal Signs however are inability to move the limb, shortening, crepitus and

the distortion of the fragments. The bone may be broken obliquely or transversely and the fractured extremities distorted by the actions of the muscles. The first object to be accomplished is the co-adaptation of the extremities and preservation of the parts at rest. The bone almost always unites, but generally with some shortening except when treated by the apparatus hereafter to be described. The condyles of the femur may be sometimes fractured; it results from much the same kind of violence as all other fractures, sometimes being caused by the limb being wrenched. It is recognized by crepitus which can be caused by the flexion and extension of the joint. The evil consequences which are so apt to follow these fractures, such as inflammation anchylosis, & almost certain deformity, the greatest dangers to be apprehended, should make the Surgeon proceed with the utmost care in the treatment. Either condyle may be fractured. The femur may be fractured just above the

condyles, and is known by the usual signs. Such fractures almost always result in deformity and the loss of the use of the joint.— These fractures are all recognized by similar signs and appearances, and whether it be the condyles of the femur, the patella or the head of the Tibia, the treatment is in all very much the same. Evaporating lotions, bleeching at times, become necessary, when inflammation and swelling has set in +. The leg should occasionally be removed from the splints and exercised for the purpose of preventing anchylosis.— The Patella is liable to trans= =verse and longitudinal fractures, and seldom to compound fractures. These accidents are generally caused by running violently up stairs, jumping &c. Instead of a fall being generally the cause of a fracture to the patella, it is almost always the consequence.

When it is fractured transversely the upper fragment is drawn up from the lower by the

action of the rectus crural and other muscles. Reunion of the parts concerned is not at all improbable, in fact with proper care it can seldom fail to take place. The great danger being, as before stated, to guard against anchylosis. Treatment similar to the others. —

Fractures of the head of the Tibia sometimes occur, as an oblique fracture into the knee joint. It is readily recognized and the treatment is similar to that of the fracture of the condyle of the Femur. There may also occur a fracture just below the joint, which may be treated as other fractures. Fractures of the shafts of the Tibia and Fibula are said by many writers to be of very common occurrence; and many eminent surgical practitioners have given interesting statistics to sustain the assertion. Either bone may be the seat of fracture or both bones may be fractured at the same time. Occasionally one of them is fractured and the other dislocated. Of the

two, the fibula seems to suffer fracture more frequently than the Tibia. We will first consider fractures of both bones; they are caused by a heavy body either falling upon or passing over the leg. They are sometimes broken when the foot is caught between some confining object & the person falls; they are sometimes broken by falling from a great height. These fractures are recognized by pain, inability to walk, change in the shape of the limb, and on rotating the foot, crepitus. They may be either simple, compound or comminuted, the compound seems to be the most frequent. The muscles acting on the fractured portions, will make the seat of injury very apparent. Angular displacement may take place, by the action of the extensor muscles. The prognosis in these cases is generally favorable. Treatment hereafter. The Tibia may be broken by direct or indirect violence. These fractures

are recognized by crepitus, pain and displacement. The prognosis almost always favorable. The Fibia is often fractured by what is called the Contre coup or counter Stroke. The Treatment will be as usual.

The Fibula may be fractured in the upper two thirds, by direct violence, without injuring the Fibia. The lower third may be fractured by indirect violence. The deep situation of this bone and the covering received from the large muscles surrounding it, render it capable of sustaining great force without yielding. The detection of fractures in this region is somewhat difficult on that account, crepitus may be produced by pressing the foot outward. It is said to be more commonly fractured below than above The prognosis is favorable. Fractures about the ankle joint are generally of so serious a nature and are so complicated as to demand amputation. It is always advisable

however to endeavor to accomplish a cure, before resorting to this last expedient. The Surgeon accomplishes many of his triumphs by the valuable aid of Nature, and it is well to see what natures efforts may accomplish before we act, perhaps, too hastily. The Os Calcis is sometimes but rarely, fractured. Sir Astley Cooper mentions one case in which the Os calcis was fractured, by the person stumbling; in which case the upper fragment was very much distorted, & he states that it was impossible to keep the bones in apposition The Treatment in that case was a high heeled boot.

The bones of the foot are sometimes fractured by a crushing violence, as that of a car or Cart-wheel passing over them. They are seldom successfully treated, except where the injury is very slight. Like those of the ankle joint after a laudable effort to save it amputation most often becomes necessary.

The Treatment of fractures & the consequences

being the third division of my thesis, I shall now proceed with this division.— The first object to be accomplished in the treatment of all fractures is to reduce them as soon as possible; or in other words to bring the extremities of the fractured part in as close proximity to each other as possible. This is accomplished by placing the patient in such a position as to prevent any strain or traction being made by the action of the muscles on the fracture. Should the soft parts be lacerated or injured in any way, such palliative means should be resorted as the nature of the case may require.— Evaporating lotions, leeches, poultices, the watery solution of Opium and many other agents, which must be adapted to the case, may be used. Of the many kinds of splints which have heretofore been used by Surgeons in the treatment of fractures of the lower extremity, those which appear

to have been most recommended, are the splints of Dupuytren, Boyer, Physick, McIntyre and Hagedorn. To enter into a full description of each of these different apparatus' would be wholly unnecessary. Each may have some peculiar merit which I have not or cannot discover, unless perhaps it is their unwieldiness. In the eyes of some they might perhaps supersede the use of the one I shall suggest, but they never can surpass it in usefulness and merit. The Anterior Splint which I shall advocate the use of, is one which possesses, in an eminent degree, all the necessary arrangements for the treatment of such fractures, at the same time combining with them, the merit of being a very portable, an easily adapted, and very cheap apparatus. For this great improvement, of which I shall speak more fully hereafter, we are indebted to Professor Nathan R. Smith the distinguished Surgeon of the University of Maryland. To his genius are the victims of these misfortunes, to pay their devoted

tributes, and the profession owe a debt of gratitude to him for placing at their disposal an apparatus of so great value. Professor Smith seeing the inutility, and inconvenience with which the use of the before mentioned splints was attended, in the numerous cases, which fell under his observation; after several experiments, concluded upon the use of the Anterior Splint in the treatment of all fractures of the lower extremity. His trouble, if any it was, has been fully repaid, by his marked triumphs in so many severe cases.

The anterior splint when first brought into use was made of some light wood; but within the last Eighteen months, the Professor has made an improvement in the materiel, which is of very great value. I mean the substitution of the annealed wire for the wooden apparatus. Being made of this wire, which requires but few minutes, it becomes more valuable than the wooden one, on account of the facility with which its adaptation to the limb can be accomplished.

The splint consists of two pieces of annealed wire, of the length of two, three or four feet (as the case may require) and about three quarters of an inch in circumference, attached at the extremities by cross pieces, of from three and an half to four inches in length, making a sort of parallelogram: There are also several cross pieces or slides, made with a loop, into which the hook of the cord, by which the splint is suspended, is placed. These clasps are placed at different intervals on the splint & are made to slide with facility to & fro.- This constitutes the splint. In addition to the above, a cord or rope, about one yard long is to be obtained, to each end of which a hook is to be securely fastened; and then to complete the arraingements you must have another piece of rope some two yards long, with a slide attached to it, so that it may be lengthened or shortened at pleasure. Thus we will have an apparatus as simple and unencumbered as is possible. I have endeavoured to make a drawing of it

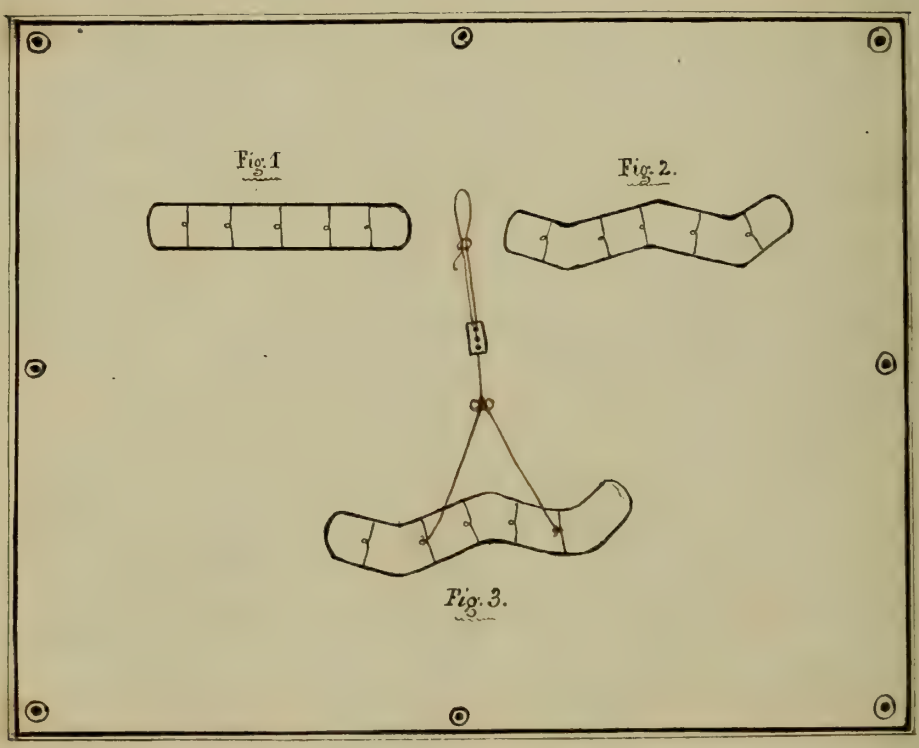


Fig. 1
Fig. 2.
Fig. 3.

which, though imperfectly done may serve to illustrate my description.— In the application of the Anterior splint, the annealed wire one can be easily adapted to suit the limb of the patient and the kind of fracture to be treated. For instance we will prepare one for fracture of the femur:— placing the patient in a recumbent posture, I take a splint as above described (see fig. 1) I hold it over the limb of the patient and measure by the eye, to the place where the angle is to be made, then marking the spot, place the wire over the edge of a table or some such thing, I give it an angle, at the spot marked suitable for the amount of flexion necessary— and then I make in the same way, a suitable bend at each end of the splint, for the angle at the hip & also at the foot: the apparatus then presents the appearance as in figure 2d. The next step after having adapted it, is to take a roller and wrap it round the splint from one extremity to the other; unless there be a compound fracture & then there is to be a sufficient space left open, so that free

access can be had to the wounded part, without disturbing the limb or apparatus. It is then placed on the anterior portion of the limb, and several broad strips of adhesive plaster being then passed gently under the limb and secured to the splint, it may be easily raised from the bed, by applying the rope with the hooks attached, without causing any pain whatever to the patient.

A roller is then to be applied comfortably, around both limb and splint.-(Using two rollers if it is a compound fracture, one to be applied above, the other below the space required to be left open.). Your roller or rollers being secured the piece of rope with the slide, then comes into requisition; this must be attached to the ceiling in some secure place & the other end tied to the piece to which the two hooks are attached, as in figure 3.

The leg can then be swung up and the bandage (outside) soon adapts itself to the surface of the leg, which rests as beautifully as possible. It may be swung to & fro, without disturbing the fracture

fragments, and the patient is enabled to move himself about in the bed. With one of Physicks modifications of Desaults' splint, the patient would not only find it utterly impossible to accomplish this motion without disturbing the fracture; but would I imagine subject himself to the severest pain.- One of the greatest beauties of the anterior splint, is that the limb rests entirely upon a surface adapted to it; whereas in any of those splints referred to you find things just to the contrary. I have seen it applied in, I think, at least twenty five or thirty cases and I have never yet heard one patient express any dissatisfaction or utter the slightest complaint. Another great advantage it possesses over those apparatus' referred to, is in the treatment of Compound fractures. In applying the roller a space is left open over the seat of the wound, by which you are enabled to have free access to it, and to wash it, drop it and examine it daily without removing the apparatus.

You have not this, in those other splints, but on the contrary, if you want to dress a wound you subject the patient to the utmost pain in removing the cumbersome piece of furniture in which you have him confined, to enable you to get at the wounded part. - If there be any reason to suppose that the leg may become shortened, traction can be made by giving obliquity to the cord by which the splint is suspended; this is accomplished by moving the bed in the direction desired, and the traction made is so gentle & is kept up with such continued regularity, that the patient never complains and the consequences are always favorable.

I have seen the anterior splint employed in the treatment of all fractures of the lower extremity, with the exception of those of the foot, and I must say with the most marked success, and further that the first case of shortening of the limb, where this splint was employed has yet to fall under my observation.

One of the greatest triumphs which the distinguished

Surgeon & inventor of this splint has accomplished by its use, was in the treatment of a colored boy, about sixteen years of age, who came into the Baltimore Infirmary some three or four weeks after his femur had been broken, with it united, partially. The distortion in this case was very evident, and the limb was at least two inches shorter than the other. Prof. Smith determined to prove the efficacy of his apparatus and had in this case a beautiful opportunity. The callous which had formed, was with some violence broken, the leg was extended and the anterior splint applied. The boy was sent to his bed with directions that gentle traction should be made, in the manner before described, and should be steadily kept up. This was done, reunion took place, the boy continued to get well and at the expiration of five weeks he was ordered to be sent home, having as good a leg as ever and without there being even half an inch difference in its length, in

comparison with the well one. I have read much concerning the many cures which have been attributed to the splints of Physick Desault & the others mentioned,- their great triumphs have been it appears to shorten a man's leg, and not to give it its natural length & conformation. They cannot boast of such triumphs as the one mentioned. -

The anterior splint may also be used in fractures of the Patella - the only change to be made in the conformation being the omitting the middle angle. I have seen it applied in one case & with a happy result.

Another apparatus I may speak of as being in many cases very useful, and as a sequel to the anterior splint is very often very convenient; I mean the "Starched bandage" as it is called. It may be used with considerable success in simple fractures. It consists of two pieces of binders board adapted to the internal & external surfaces

of the leg, each piece being long enough to go under the foot, where they are made to over lap. These pieces are to be well saturated with water and besmeared with a paste made of flour: the leg should be well & snugly bandaged and these pieces applied external to the bandage, and another roller put tightly on outside. When the paste dries thoroughly the pasteboard will be found to have become as hard as a piece of board, and have taken the precise shape of the limb. The patient is enabled, with the aid of a pair of crutches, to move about with facility with this application. The "starched bandage can be removed and reapplied with a great deal of facility; it is most generally applied after callous has been formed or after the fractured limb, had been in some apparatus for a considerable length of time.

I mentioned above that the only fracture of the lower extremity, which could not

be treated with the Anterior splint, was a fracture of the foot or any of the bones therein concerned. The nature of these fractures at once explains the reason why, no splint is necessary. I have never seen but one severe case of fractured foot treated and in that case, the foot was placed upon a soft pillow and soothing & evaporating applications used. Mother Nature was much more depended upon to aid the Surgeon in his efforts, than any other treatment which could be devised. —

Having now completed the discussion of the three points I named in the beginning of my Thesis, I beg leave respectfully to submit it.

D. Leroy C. Scott

Feby, 8th 1859

An

Inaugural Dissertation

on

Intermittent Fever

Submitted to the examination

of the

Provost Regents and Faculty of Physic

of the

University of Maryland

for the

Degree of Doctor of Medicine

By

Andrew D. Birch

of

Maryland.

It is quite unnecessary to give an elementary discription of this disease. From north to south its symptoms, required treatment, and sequela have been found substantially the same. Persons of every age are liable to attacks of this disease, the young rather more than the old, and even infants at the breast are by no means exempt.

Dr Stokes gives the following definition of intermittent fever — "a primative, or essential fever, composed of many paroxysms which recur at certain periods, and in the interval between which we have a state of apyrexia, or freedom from fever".

We meet with cases of this disease in which the periods of attack are by no means regular, and the state of apyrexia not well marked.

Intermittent fever may depend upon some local lesion; it is therefore not necessarily an essential fever.

As a general definition, however, the foregoing will be sufficient for practical purposes.

The three most common varieties of intermittent fever are the quotidian, the tertian, and the quartan.

In the quotidian the fit comes on every day, generally in the morning, and last about ten or twelve hours.

In the tertian we have a paroxysm on alternate days generally about noon, and lasts till evening.

The quartan has a paroxysm once in three days, usually in the afternoon.

Of these varieties the most common is the tertian.

There are also double quotidians, having

Two paroxysms every day.
Double Tertians, having a paroxysm every day, but at different hours.
Sometimes there are two paroxysms on one day, and none the next: this is called a duplicated Tertian.
The Triple Tertian has two paroxysms on one day, and one on the intervening.
In double quartans, out of three days, two have each one paroxysm, and the other none.
Of all these varieties, the double Tertian is the only one which often occurs.
The interval of an intermittent, is the space between the beginning of one paroxysm, and the beginning of the next, which in the Tertian is forty-eight hours; the intermission is the space from the end of one paroxysm, to the beginning of the next.

The quotidian commonly occurs in spring; the tertian at the end of summer, and the beginning of fall; the quartan later in the fall.

On what circumstances the type of intermittents depends, has not been ascertained.

Intermittent fever is divided into three stages — the cold, the hot, and the sweating stages.

In the cold stage there is lang our, yawning, stretching, chilliness, paleness, blue lips and nails, constriction of the skin, pulse small and irregular, breathing oppressed, sensation impaired, mind weak and restless, sometimes stupor, coma and convulsions, feeling of fulness about the head.

The hot stage is usually attended with

nausea and vomiting, scanty and high coloured urine, hurried breathing, considerable headache with Throbbing of the Temples, redness and fulness of the face, dry, hot skin, thirst, pulse bounding, jerking, hard or frequent, tongue furred, confusion of thought or even delirium.

A moisture at length breaks out on the face and neck, which gradually extends over the whole body, and the febrile symptoms then rapidly abate.

The pulse sinks to its natural standard, the feeling of weakness goes off; the heat of skin, headache, and Thirst abate; the apetite returns; the secretions are restored to their natural condition, the urine depositing a lateritious sediment.

The causes of intermittent fever are divided into the predisposing and exciting.

The predisposing causes are, whatever circumstances depress the physical and mental condition of the system. Certain states of the air favour the predisposition of the body to receive ague, and induce a tendency to relapse from the application of slight causes.

Of these the most remarkable are the concurrence of a cold with a moist state of the atmosphere.

Weakness of the body, whether owing to unwholsome food, intemperance, or previous diseases, increases the susceptibility to ague.

Hence it is that it prevails with so much greater frequency in camps than in other situations.

There is reason to believe that anxiety and inactivity of mind predispose to attacks of intermittent fever.
Another predisposing cause of ague is habit, or the tendency which previous attacks give to a recurrence of the complaint.
In this circumstance intermittent differs from continued fever.
The most important exciting cause of intermittent fevers are exhalations from soil, especially from marshy grounds.
Marsh miasmata arise from the combination of earth and moisture with putrescent vegetable matter.
When the marsh is covered by water agues are less frequent.
Its attacks are more severe in hot climates than in temperate — in low

situations than in high; the upper stories of a house being much more healthy in aguish districts than the lower.

Of the exact nature of these miasmata we are ignorant; but some points have been noticed in regard to them which it will be proper to mention here.

The most elevated part of a marsh being always the healthiest, it is imagined that the miasmata are comparatively heavier than atmospheric air.

There is reason, too, to believe, that they cannot be wafted by currents of air to any great distance from the spot where they were generated, but on this point some differences of opinion have lately prevailed.

The calm months of the year being the most productive of agues, it is reasonable to suppose that the miasmata are most powerful when concentrated, and that diffusion by a brisk wind, renders them comparatively inert.

A very short exposure to the exhalations of a marsh is sufficient to affects the system.

The period which elapses between exposure to marsh miasmata, and the invasion of the disease varies considerably.

Though it cannot be disputed that the miasmata of marshes are the most frequent and important exciting causes of intermittent fever, still it would be impossible to deny that it has others.

Febrile miasmata may unquestionably arise, under particular circumstances, from almost any soil; and the disease which they excite, has, I believe, in nearly all cases, a tendency to exhibit the phenomena of intermission.

In the majority of cases, there is during the cold stage of ague, a perceptible lesion of one or more internal organs, and there is congestion of many of the viscera of the three great cavities.

The balance of the circulation is lost, the blood forsakes the surface and accumulates in deep seated organs.

The feeling of fulness about the head, stupor, coma, and headache are indicative of congestion of the brain.

There are generally symptoms which

indicate a similar condition of other organs, the lungs, heart, liver and spleen.

So rapidly does enlargement of the spleen occur in many instances, that shortly after an attack, we can readily feel and trace it distinctly.

A spontaneous termination of intermittents is a rare occurrence. When an intermittent has appeared in autumn, and is suspended in winter, it very frequently recurs in spring, and sometimes seems to be cured by the renovating influence of heat.

Agues are to be judged of in relation to prognosis, by the kind of symptoms present, and the degree of their violence; thus when coma, hiccup, delirium or convulsions occur, it is unfavorable; de-

jected expression, urine dark and fetid, cadaverous perspiration, great coldness or extreme heat continued during the paroxysm, eyes shut and mouth open; involuntary discharge of urine, are bad signs,— The intervals becoming longer, malignant symptoms subsiding, The patient more easy during the interval, youth, The disease being of short duration previously are favourable.

The indications in the treatment of intermittent fever, during the paroxysm are, To remove congestion of internal organs, to obviate inflammation, and promote perspiration.

In the cold stage, emetics, stimulants, warm diluents and pediluvium may be had recourse to.

In the hot stage, cold acidulated drinks,

sponging the body with cold water if agreable to the patient, bleed-letting, general and local, and saline diaphoretics are advisable.

Spiritus mindereri, half ounce every hour, or ten grains of salt of tartar, in a table. spoonful of vinegar, at the same intervals lemonade, and sweat spirit of nitre are useful.

Excessive stimulating articles, should be avoided in exciting perspiration during the hot fit, particularly in violent plethoric and inflammatory systems; and when the liver and spleen are affected.

Bleeding in the hot fit until the reaction is reduced, recommended; after it purgatives act more easily, and the bark has a better effect: violent local pains, a strong inflammatory diathesis,

and a full, hard, pulse are indications
for its employment.
It relieves this state when purgatives
have no effect.
The fits are rendered shorter, it abates
the fever, delirium, pain in the head,
limbs, and chest; taken particularly
in the height of the fit, and drawn into
the centre and not against the sides
of the basin which should be smooth
otherwise the inflammatory buff does
not appear.
Opium has been favourably spoken of by
some authors in the hot fit of ague.
If administered early, it often short-
-ens the fit, relieves the headache, and
brings on a profuse perspiration
with an agreable moisture of the
skin, ending in a refreshing sleep.
In the sweating stage no treatment

is necessary. When there has been sufficient perspiration some part of the body should be exposed to the air.

But the most important part of the treatment consists in the administration of the Peruvian bark. An emetic of twenty grains of ipecacuana, followed, if there is constipation, by a purge of calomel and jalap should precede the use of the bark; and if the system be feverish, the pulse quicker than usual, with white tongue and dry skin, venesection will have a good preparatory effect. The sulphate of quinine is generally administered instead of the bark; it produces less irritation of the stomach on account of the smallness of the dose required.

Some physicians recommend very large

-ministered in larger quantities and frequently repeated, beginning as soon as the fever abates: eight or ten grains of the quinine every four or five hours; but it will generally be found sufficient to give a large dose at first, and afterwards the usual dose of three to five grains.

Of the other alkaloids the Cincho-nia is the most used, it posesses the same propeties as the quinine only in a less degree, and therefore larger doses are required.

It has one advantage over the quinine, that it is much less expensive, and therefore it can be employed more extensively in hospitals.

Various substitutes for the Cinchona and its preparations, have been introduced into the Materia medica.

Among the best substitutes for the cinchona may be reckoned the different species of salix, and quassia.
They are best given in the form of infusion or decoction.
The prunus virginiana is also recommended.
The oxide of zinc and sulphate of copper are sometimes used.

Of the mineral substances employed in the cure of agues, the most powerful is undoubtedly arsenic, the efficacy of which has been ascertained by the most ample experience.
It is best given in the form of the liquor arsenicalis, in the dose of five drops gradually increased.
After a certain length of time, sometimes from the very first, it will produce nausea and vomiting, when its

exhibition must be discontinued, and
a few grains of rhubarb given.
If properly managed, arsenic will be
found, next to the cinchona, the most
generally useful of all the medicines
which have been resorted to in the to-
-eatment of agues; but its administra-
-ation requires great caution.
It should never be continued longer
than two weeks at a time, and its dose
should be diminished or suspended,
when the system is highly sensible
to its action.

The next remedy of importance
to arsenic is the sulphate of zinc.
It is given in doses of one or two grains,
three times a day, and in conjunction
with a small portion of opium has pro-
-ved eminently serviceable.
Changes of air, from land to sea, or

To mountainous and dry situations, with the cinchona occasionally, will be found effectual in preventing a return of the disease.

An

Inaugural Dissertation

on

Amaurosis

submitted to the examination

of the

Provost, Regents and Faculty of Physic

of the

University of Maryland

for the Degree of

Doctor of Medicine

by

John Ewing

of

Maryland

1857

Preface

In the following pages submitted for examination, no claim is laid to having advanced any thing new upon the subject; indeed from a mere novice one who has had no opportunities of observing the disease and studying its history, its symptoms and its termination with that is original could reasonably be expected,

---

Amaurosis

This disease may be defined as a diminution, or total loss of the power of vision, without the presence of any discernable lesion: but depending on changes in the interior of the eye, or base of the brain.

Symptoms, Great irregularities occur in the symptoms of this disease: none are said to be invariably present in all cases, except impairment of vision and some degree of strabismus, Of the symptoms referable to the feelings or sensations of the patient; the first usually complained of is a dimness of vision, with a feeling of fulness or stiffness of the eyes; which in some cases increases rapidly in intensity and in a short period total blindness ensues. But generally the disease proceeds more slowly and is more marked at sometimes, than at others, the symptoms generally becoming aggravated after long continued bodily exercise; or any unusual exertion; — by intense mental application, depressing passions, overtasking the eyes by

gazing long or minutely at a brilliant object, or by whatever tends to depress or lower the vital nervous energy. Again it occurs to some persons only in the day-time; whilst by others it is not observed except at night; This form of the disease is termed periodic, and is generally soon succeeded by permanent blindness. In other cases the failure of sight assumes the Myopic, or presbyopic form, of which the latter is the most frequent. The patient complains of seeing things through a veil, or mist, or as if a piece of thick gauze was interposed between the eyes & the objects they are looking at; in the night, this gauze often looks red and fiery; & at the time objects appear to be enveloped in a haze, or nebula; a symptom, termed visus nebulosus,

In some persons the mist appears as a constantly increasing cloud; at times it appears of a light greyish colour: again it looks dark and smoky. Sometimes in imperfect amaurosis objects not only appear dim but crooked irregular and distorted: Sometimes one half of only of objects can be seen, at other times every thing looked at seems to be covered with dark spots or to be but partially illuminated: The flame of a candle to the double, forked, elongated, or inverted; and surrounded with an iridescent halo. This symptom has been regarded by some authors as very unfavourable, indicating as they supposed, a diseased condition of the brain.

Some again can see but part of an object the other part appearing to be wanting, or

concealed from view. As an example when looking at a word or line but part only can be seen, The celebrated Abernethy was temporarily affected in this way.

Another symptom usually present is that of Muscæ Volitantes; the patient fancies he sees flies or dark spots floating before his eyes. Though the symptom is only important, when associated with others.

In many examples of Amaurosis, one of the most disturbing symptoms, is the presence of balls of fire, or flashes of light, passing suddenly before the eyes; when the lids are closed; this is an early symptom and is most common in those of a full and plethoric habit and is generally a source of much alarm to the patient,

In some persons there is a great intolerance of light in the incipient stages of the disease; in these cases the impairment of vision, probably depends upon a Sub acute inflammation of the retina, or of some of the internal structures of the eye, In others again there is a continual thirst for light, a desire for greater illumination,

The following symptoms are the principal objective; or those discoverable on examination of the patient,

There is something peculiar, in the gait, and expression, of an Amaurotic person; by attending to which alone, you may almost recognize the disease; His walk, and all his movements, are attended with an air of uncertainty; the eyes are not

directed towards surrounding objects, but more continually, from side, to side, as if seeking for something upon which to rest, They are wide open, and have an unmeaning expression or vacant stare; the lids move imperfectly, and there is not that harmony of movement existing between the motions of the eyes, that characterize the healthy condition of those organs, This vacant stare, and wandering, of the eyes, from side, to side, is not observed in those patients whose blindness results from opacity of the crystaline lens, or its capsule. Persons on the contrary affected with cataract; still appear to look around them, as if concious of the presence of objects, although no image is reflected upon

the retina, Except in cases of congenital cataract, when the eyes soon acquire, that continual mobility, and vacuity of expression, so characteristick of confirmed Amaurosis.

The pupil is usually somewhat enlarged in incomplete amaurosis; except in those cases attended with intolerance of light. The iris moves sluggishly, and as the disease advances, ceases to move entirely; and when the blindness is complete; it recedes almost to the margin of the cornea, around which a mere ring is visible; consequently the pupil appears greatly dilated,

When the disease is confined to one eye only, we sometimes find the iris in its normal condition; if the sound eye is open,

but if we close this eye, the iris of the affected one, instantly becomes motionless; and is not affected, by any modification of light, All independent movements of it own are lost; and those observed, when the healthy eye is opened, are only associated, or sympathetic, depending on reflex action through the medium, of the third nerve,

But occasionally, we find even when there is entire absence of vision; that the independent movement is not affected, but that both irides move as perfectly, as if the organs were in a healthy condition,

. Andral relates a case, which examination after death, showed to be connected with disease of the cerebellum; in which the iris dilated or contracted rapidly upon the

withdrawal, or admission of light.

Diagnosis. Cataract is the only disease, with which amaurosis is likely to be confounded, and even from this, a little attention, to the characteristick symptoms, of the two affections, will enable us to distinguish it, with absolute certainty.

1st. In cataract, an opake body is observed behind the pupil and the impairment of vision, is in direct proportion, to the extent of the opacity, whilst in amaurosis, the pupil presents its natural colour. 2nd. In cataract objects appear of their natural size, shape, and colour; only they are seen less clearly. Whereas in amaurosis, they appear, lengthened, or shortened,

distorted, in shape and discoloured; the flame of a candle appearing split, circled, and surrounded by a halo of prismatic colour; and muscae volitantes, and flashes of light, and balls of fire, which are present, and form so distinct a symptom in amaurosis, are not observed in cataract,

3rd. - In cataract, the vision is best in a dull light, especially when the opacity is small; but in amaurosis, the patient sees best in a bright light,

4th. - In cataract, patients are always able, to distinguish night from day; and he moves his eyes as if vision was not impaired; on the other hand in amaurosis; there is a vacuity of expression, and an inability to fix the eyes in one direction,

5th, In cataract the iris retains its mobility, and the pupil is but slightly dilated; but in Amaurosis the iris is immovable or moves sympathetically; and the pupil, is greatly dilated. 6th, Double vision Myopia and presbyopia which are so often attendant upon amaurosis are not observed in cataract,

7th, If the catoptric test be applied, that is the method of examining the eye by the reflection of light; it will be seen, that the three images of a taper, remain as distinct as in the healthy eye; whereas, in cataract; the small inverted image, reflected from the posterior surface of the lens; is from the the first rendered indistinct, and soon disappears.

and the deep seated one from the anterior surface is soon abolished also,

Prognosis, This is almost always unfavourable; unless it depends upon some evident, functional derangement which is capable of being removed. But when it proceeds from organic causes, from some change in the nervous apparatus of the eye; we have very little to expect, from any course of medication, that may be pursued.

Proximate Cause, - Amaurosis, appears most commonly to depend, upon some alteration, in the retina, optic nerve, or base of the encephalon; which gives origin, to these nervous appendages of the eye; - which may be the result of a low

degree of inflammation in those parts; as it may be produced by pressure upon the retina, from a morbid condition of the vitreous humour; or by malignant disease; by atrophy, by pressure upon the optic nerve, or optic tract; by the development of tumours, within the cranium; or by an exostosis. It may also be caused by effusion without the retina; pressing upon its convex surface; by a fractured bone, or by concussion. Amaurosis is sometimes caused, by compression, from extravasated blood within the cranium; also by aneurism, within the orbit; or softening of the parts of the brain, connected with the optic nerve. It occasionally results from the products of inflammation; having its seat in the

membranes of the brain, or parts connected with the organs of vision; Apoplexy may give rise to it, Such are the principal conditions, upon which Amaurosis may depend; but any state that destroys the sensibility of the retina; and renders it incapable of appreciating correctly the impressions of external objects; or the optic nerve incapable of conveying to the brain, the impressions made upon the retina; or that part of the encephalon, which gives origin to these nerves unfit to recognize those impressions; may be a proximate cause of the disease.

Predisposing Causes. From the known fact, that several members of the same family; have for several generations,

been the subjects of the organic form of this disease; authors have been led to suppose, that it is sometimes hereditary. Nor is there any thing improbable in this; as nothing is more common, than for defective hearing, to be transmitted through several generations; and there is no good reason, why one affection, would not be as likely, to be inherited, as the other. Females, are said to be more liable, to inherit this disease than males; this hereditary form, seldom manifests itself in early life.

Exciting Causes. Among these may be enumerated: whatever circumstance, is calculated to overstimulate; and exhaust the retina. As long continued exertion of the eye, on minute objects; exposure to intense or glaring light, especially if it be combined with heat;

has often been found, an exciting cause of the disease. The form which indeed is of the congestive, or inflammatory variety; and these exciting causes, may all be strengthened, by any circumstance, that is capable of producing an undue fullness of the vessels of the head; as stooping, tight cravats, over indulgence in the luxuries of the table; intemperance, or constipation. Engravers, Watchmakers, and Tailors, are often subject to this form of the disease. The arrest of some long continued evacuation; as that of bleeding piles, the menstrual secretion; or the healing of old ulcers, has been known to act as an exciting cause, wounds upon the orbit, in which the eye was not implicated; has been known to induce the disease;- But in these cases

it was probably the result of concussion, or of subsequent inflammation, extending to the nervous apparatus of the eye.

One curious case is on record, of amaurosis produced by dental irritation; and after thirteen months continuance, ceased almost immediately, upon the extraction of a carious molar tooth. The translation of gout, or sciatica, continued gastric and intestinal irritation, have operated as exciting causes.

Thus we have seen, that whatever has a tendency to produce, a determination of blood to the head; or obstructs its free return, to the right side of the heart may act as an exciting cause, and aid in the development of the disease.

Yet on the other hand it would appe-

as that an anemical ~~or~~ ~~empo~~ condition, and diminution in the quantity of the circulating fluids; inducing thereby an emptiness of the vessels of the brain, will also tend to its production. Menorrhagia, Leucorrhoea, and excessive lactation, have all been known to excite the desease. Prof. Meigs, in his valuable work on obstetrics, relates an interesting case of temporary Amaurosis, attending puerperal convulsions; ~~obstr~~ and resulting from the detention, of carbonized blood, in the vessels of the brain,

It is said also, at times to occur, as a symptom of hysteria; Dr. Watson letates a case of that kind which feel under his own observation: in which it twice occurred, in a hysterical female; & as often disappeared,

Narcotico-acrid poisons, as tobacco, belladonna, stramonium, and others of the Solanin, will occasionally produce temporary amaurosis if taken in large doses or too long continued

Treatment. From what has been stated, of the proximate, and predisposing causes, of this disease; it must be evident that no special rule of treatment can be laid down; that will be applicable in all cases, to meet the indications, that may be present,

If the affection is attended with intolerance of light, or has followed a wound of the orbit, or if the eye has been overtaxed, by long application to minute objects, or been exposed to intense or glaring lig-

ht, as that of lightning, or the reflection of the sun rays from snow; - or if there be evidence of congestion, as head-ache vertigo and turgescence of the vessels of the face, with a hot dry skin and hard pulse; - if plethora be present; or if there be flashes of light, and balls of fire, seen before the eyes, or if it has followed the sudden suppression of some habitual discharge; as the menstrual secretion, bleeding piles, or the healing up of an old ulcer, or upon retrocedent gout, or if it accompanies acute hydrocephalus, which is sometimes the sequel of scarlet fever; - In each and all of these cases the antiphlogistic plan of treatment, should be adopted and vigorously pursued,

Blood-letting, local and general as the case may demand, should be had recourse to, and be repeated if necessary. A purient should be given to evacuate the bowels; the diet should be light, and strict repose of the affected organ be enjoined; no bodily exertion should be permitted, that would be likely to increase the force of the circulation; and thus add to the congestion, already existing. If the disease has come on suddenly and there are evidences of active inflammation, mercury should be given rapidly, until it produces its constitutional effects.

But even when the disease has been more chronic in its character, and of long duration, the happiest results sometimes

to follow a mercurial course. Tartar emetic may sometimes be combined with calomel, with advantage, if there is much vascular excitement, or a hot and dry skin; Counter irritants of all kinds are beneficial, if symptoms of active inflammation are not present; blisters, or tartar emetic ointment applied behind the ears, or to the nape of the neck; hot pediluvia rendered more stimulating by the addition of mustard; and in cases of long standing, issues in the arms are sometimes useful.

In atonic amaurosis or that form of the disease which follows some long continued or exhausting discharge, as hemorrhage, after parturition, lactation, leucorrhea,

or other debilitating causes; a different plan of treatment must be pursued: Here the pallid countenance; the small, and frequent pulse, the depressed spirits, and great debility; all contraindicate the employment of depressing agents.

The treatment in these cases should be directed; first to the suppression of the discharge upon which the debility depends; Secondly, to invigorate the system, by change of air, or exercise; the exhibition of iron, or quinine, and especially, to a generous, and nourishing diet

The bowels should be regulated by mild aperients, as rhubarb, or aloes, combined with Hyoscyamus; the cutaneous secretions should be promoted, by exercise,

friction, or the shower bath, Assafoetida and other fetid stimulants may be of service if there is much depression of spirits. Strychnia is highly recommended by some practitioners in this variety of the disease to be administered in small doses (gr ½). It may also be applied to the skin, after the cuticle has been removed, Stimulating snuff, revulsives applied to the forehead, as croton, or cageput oil, or a solution of veratria may occasionally be of service

When it occurs from narcotico-acrid poisons, and it still persists, after the ordinary effects of the poison have passed away, Electricity, counter-irritants, and the cold shower, bath are most likely to be of service,

Amaurosis may also exist as a paralytic affection, induced by the salts of lead. The Iodide of Potassium, is the remedy, best adapted to these cases,

When the causes are organic in their nature, or the disease has been preceeded by an attack of apoplexy, or secondary syphilis, or if there be reason to suspect an exostosis, or tumours within the brain a mild course of mercury, or Iodide of Potassium, combined with sarsaparilla and the employment of counter-irritant, and attention to the patients general health, should all be resorted to, and may occasionally be successful,